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London Program 2009 Part 2

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Jethro Hon

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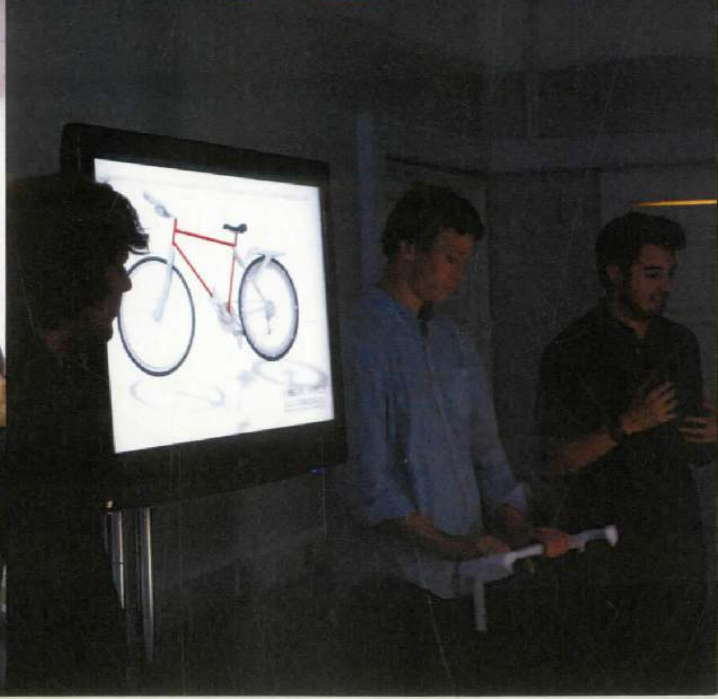
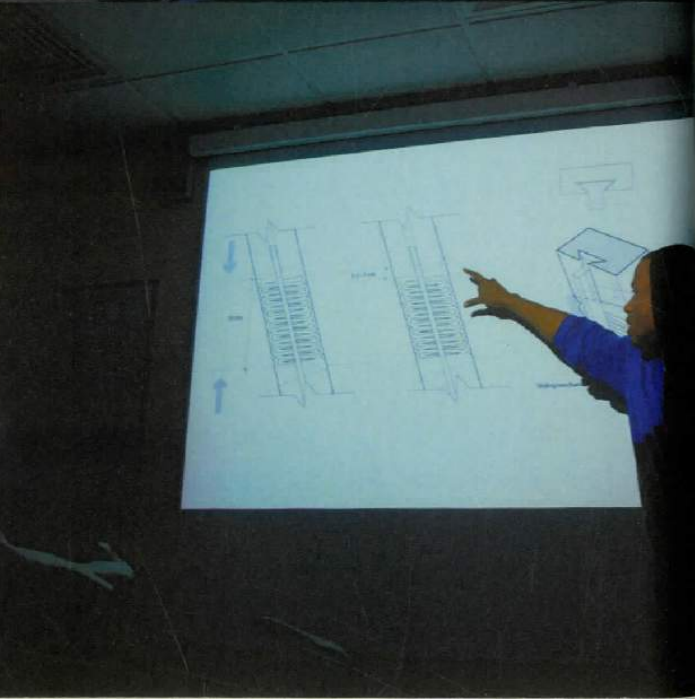


PHASE I



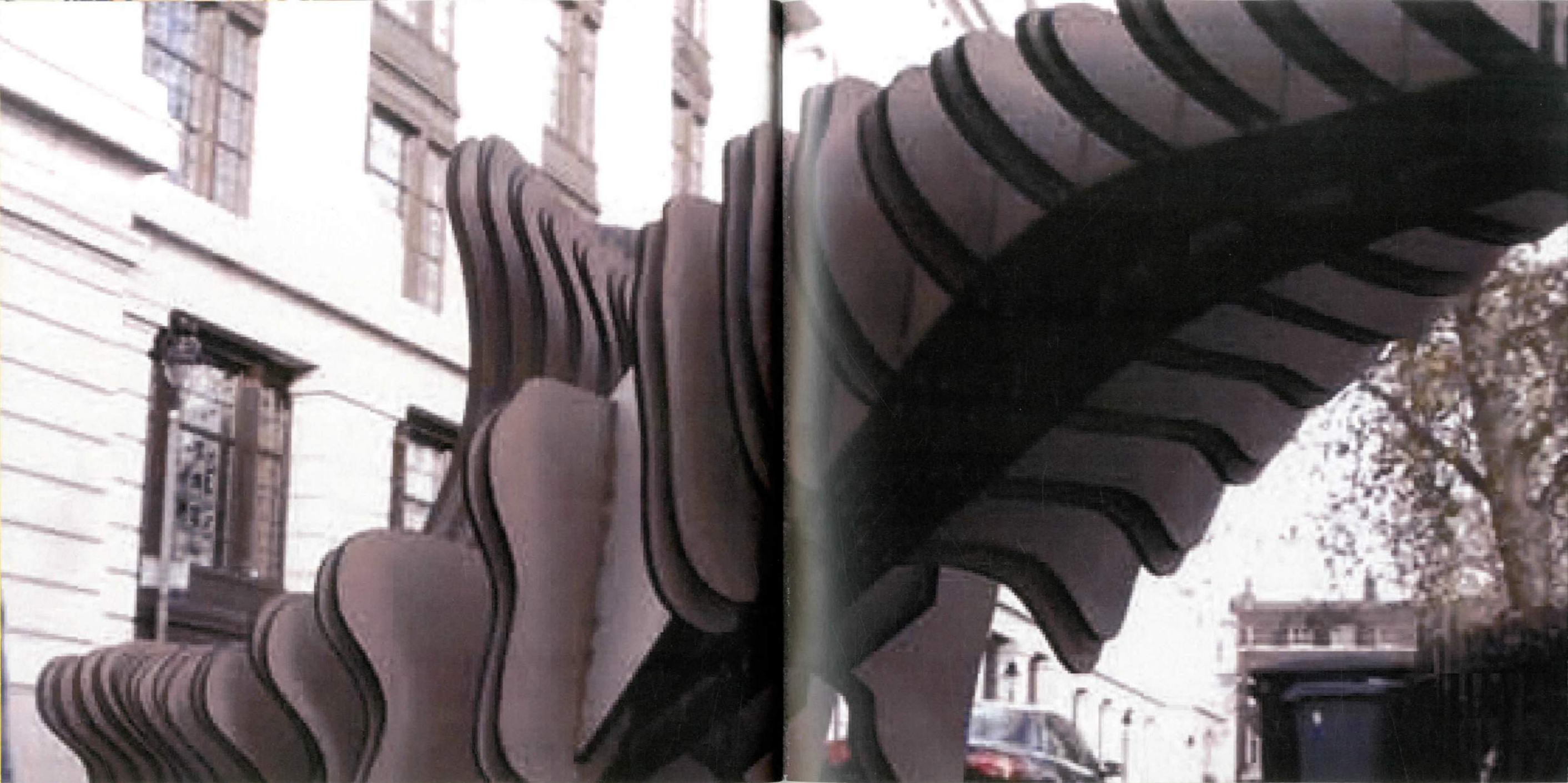
REVIEWS






PHASE II

Customization of London Transport





Phase II begins an in-depth investigation upon earlier group developments, by allowing specializations to accelerate and develop strategically piloted opportunities in a real environment. Each group is requested to develop full-scale working prototypes to demonstrate their project. Functional working parts & assembly will be considered a strong medium during experimentation and evaluation throughout the design development. By documenting the process, it is encouraged to allow design cycles to become part of formulating criterias for optimization.

(background image: 1:1 prototype of a 5-Axis milled foam tile by Kervin Brisseaux, Kyung Eun Lee, Claire Mo)

Customization of London Transport

We would like to use London, and in particular the public spaces to make full scale constructions, These constructions or interventions should be adaptable to their particular environment but should not be exclusive to that specific location. We would like to think that these structures should have a direct influence on their environment, be adaptable to a specific location in time and space and they should be temporary ... the word parasitic transformer springs to mind

These interventions should exceed their pure formal qualities. We are not so much interested in the pure technical and formal capabilities of computational design and digital fabrication. We would like to put design itself central and let technology be a tool within the design process. We do not want to create a fetish for technology, but implement it in such a way that technology is seamlessly intertwined with the design.

Integration and Awareness

Redesigning the Traffic Island

Kervin Brisseaux

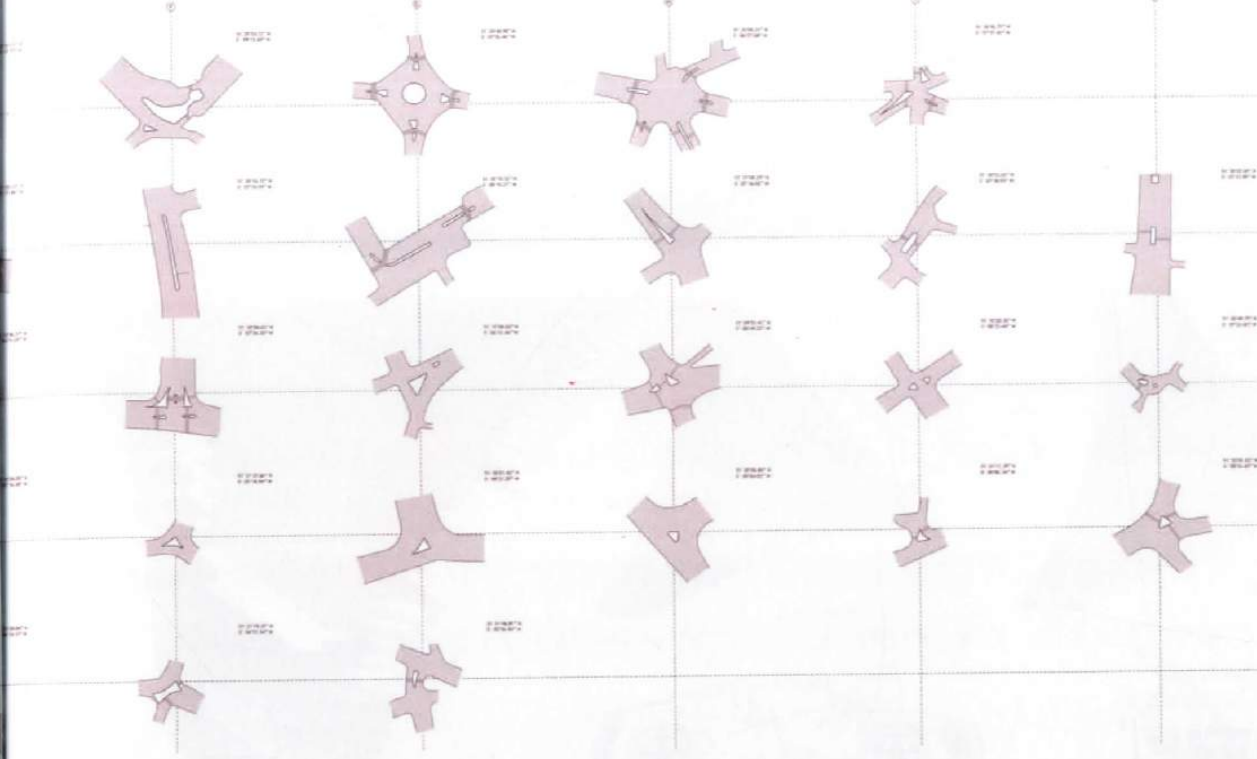
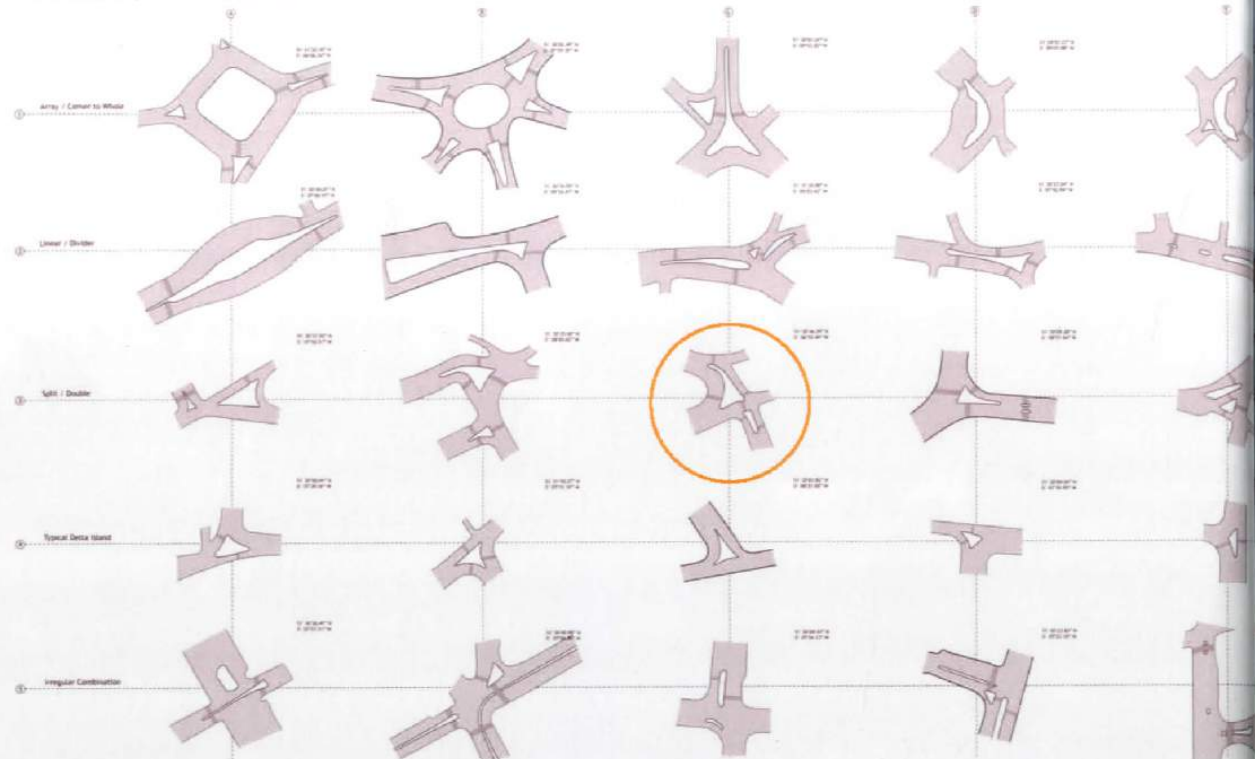
Kyung Eun Lee

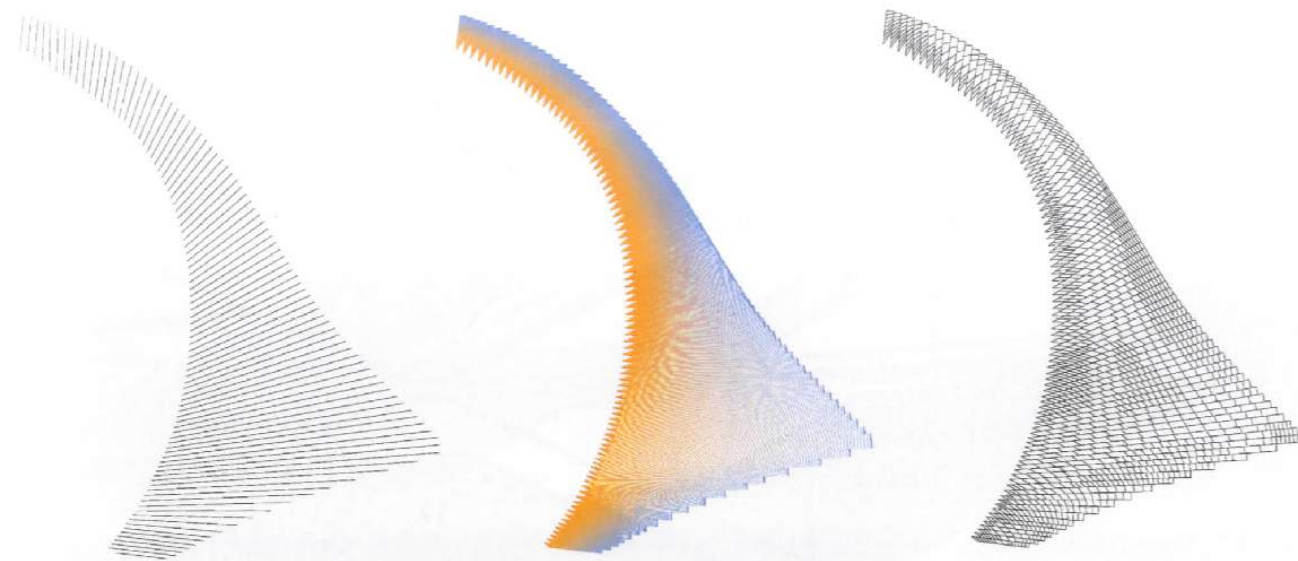
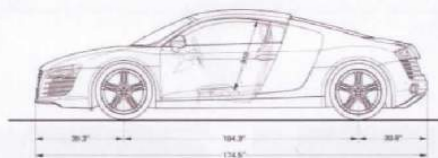
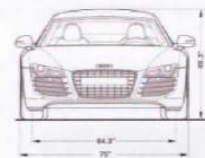
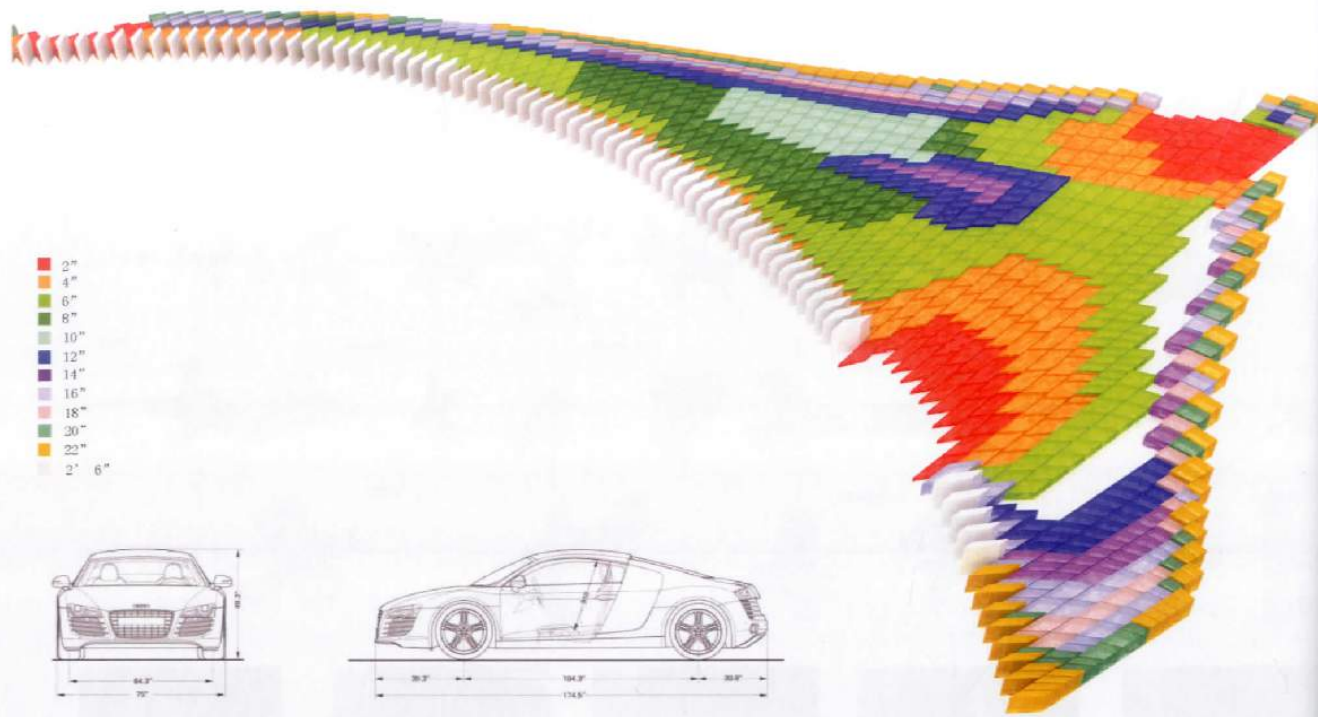
The island is an urban bi-product of traffic flows. For the pedestrians, it acts as an extension of the sidewalk. It is utilized as a safe zone between long distances. It also diverts the flow of the traffic for the automobiles. In addition, there are a variety of parts that do different things: signals, fences, cones, lamps, etc, making it very similar to the neighboring sidewalk. These parts attempt to improve the island's purpose. All of these things perform as they are expected to, but the parts are not successfully integrated.

Furthermore, after surveying various traffic islands throughout London, we discovered that they do not function quite as well in the evenings as they do during the day. The island edge is hardly visible as well as some of its signage. As a result, the context between car flow and pedestrian crossing becomes less defined. Thus, it is necessary to enhance the awareness of the traffic island.

Our goal is to design an urban typology that redefines and signifies the island within an integrated system. The intervention will specifically happen on the island edge and ground, which stays around a car's headlight level to address drivers' sight, as well as open up the visibility to the traffic environment.



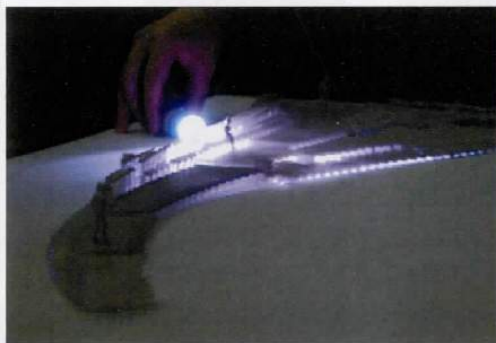
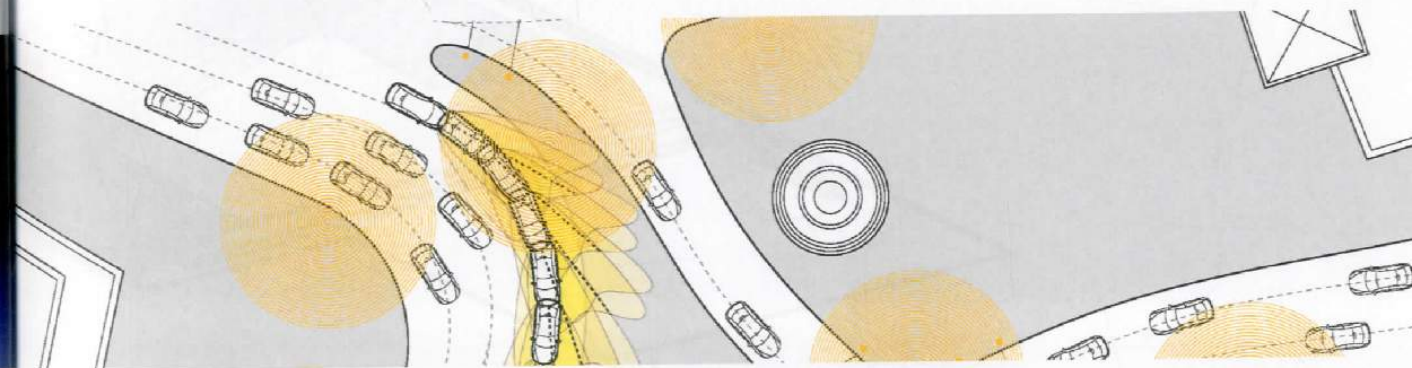


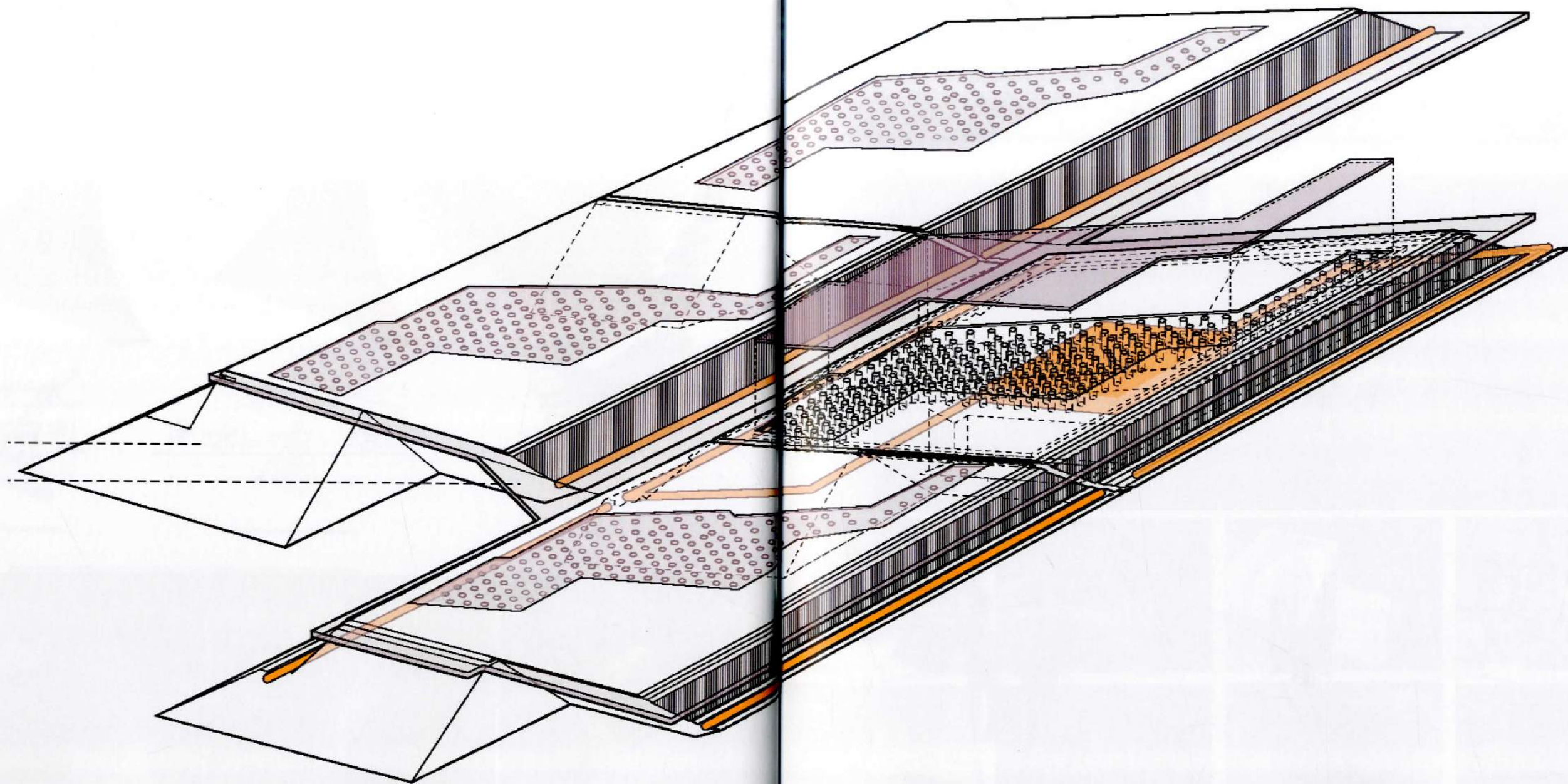


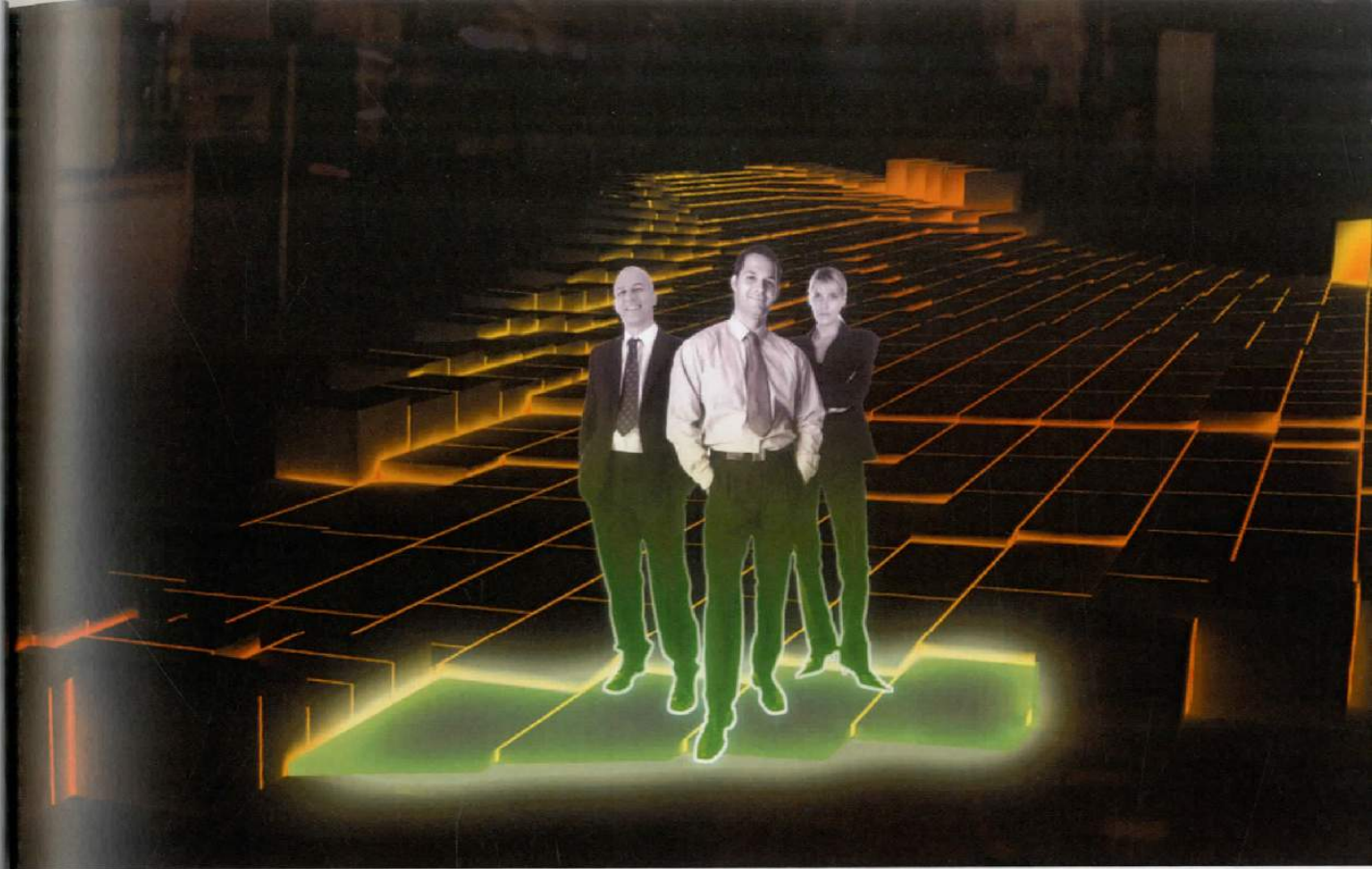
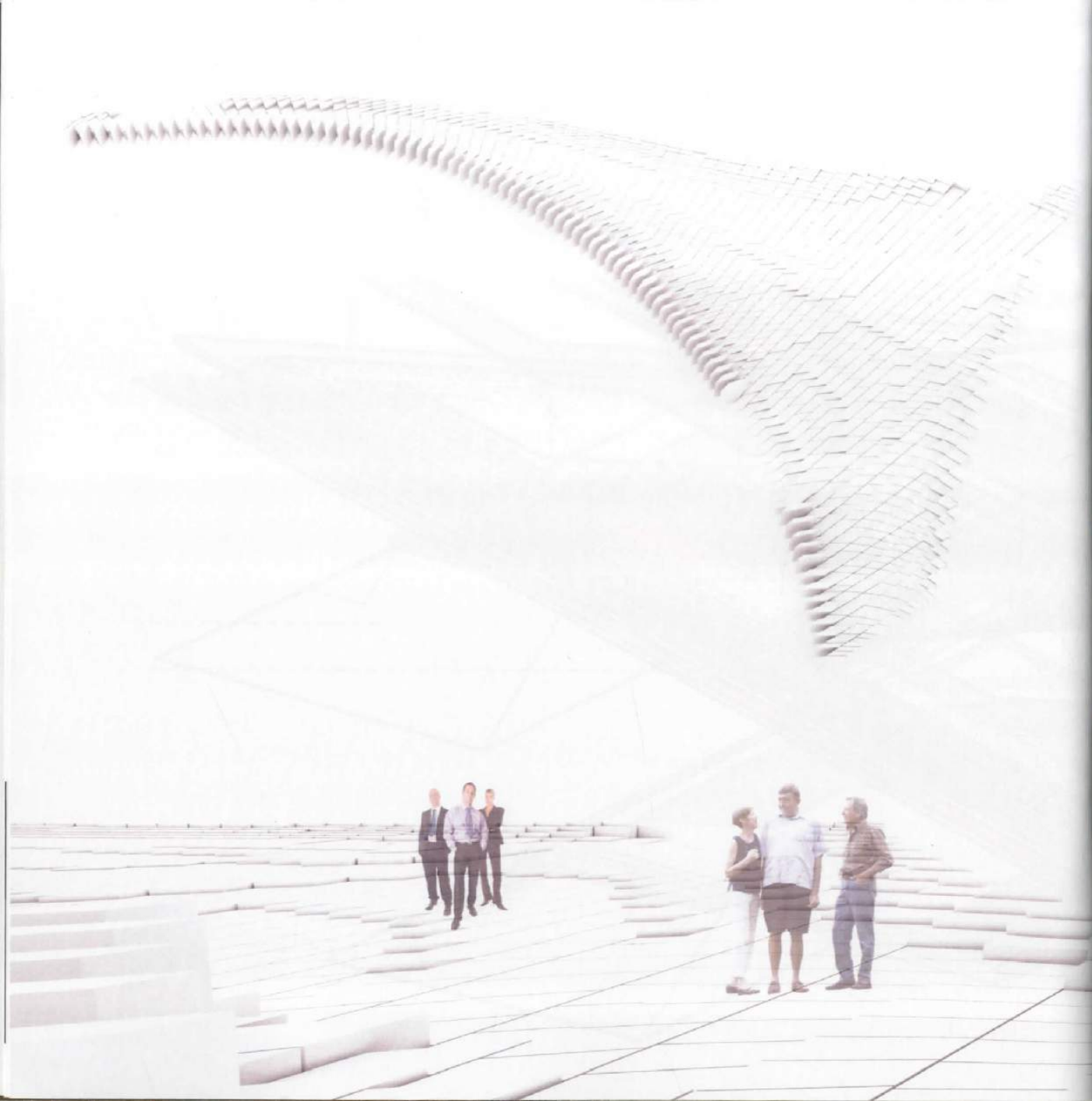
Car Traffic

Gradation of the Geometric Curve

Pedestrian Path







Folding Pontoons

Jose Manuel
Erwin Riefkohl

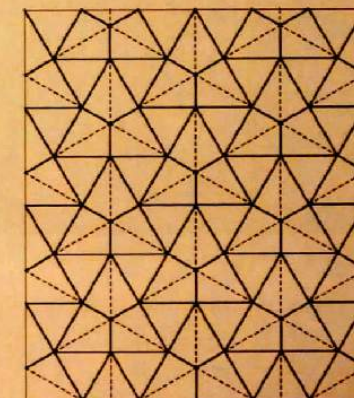
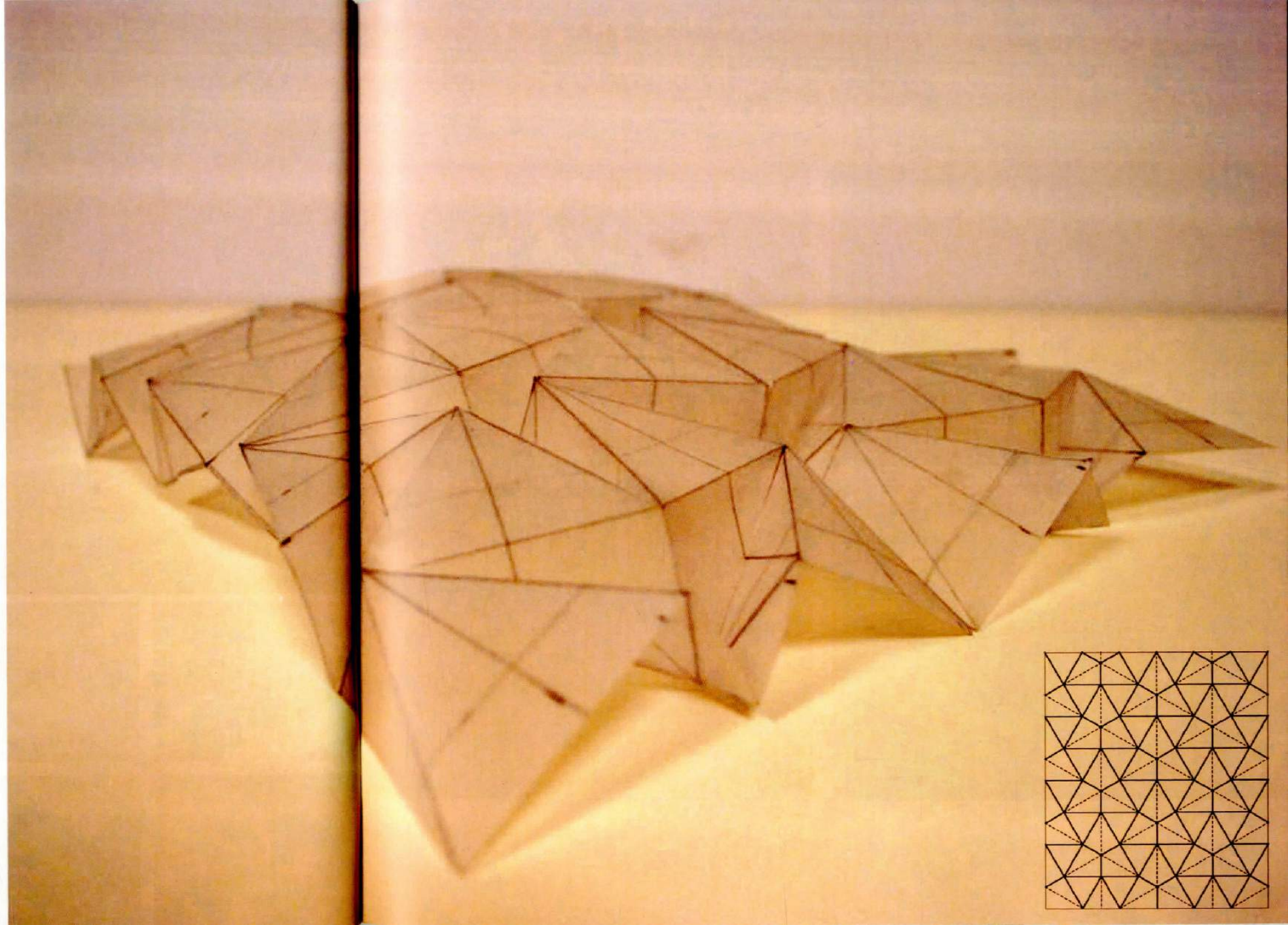
New technologies in digital fabrication and manufacturing has provided not only the precision and versatility in construction, but also the flexibility in freeform design and construction. Although flat-sheet materials continues as industry standard in providing cost effective, efficient building materials for a variety of purposes. While this could be viewed as limiting, we wanted to take on the 2-dimensionality as an opportunity in designing and controlling rigid structures.

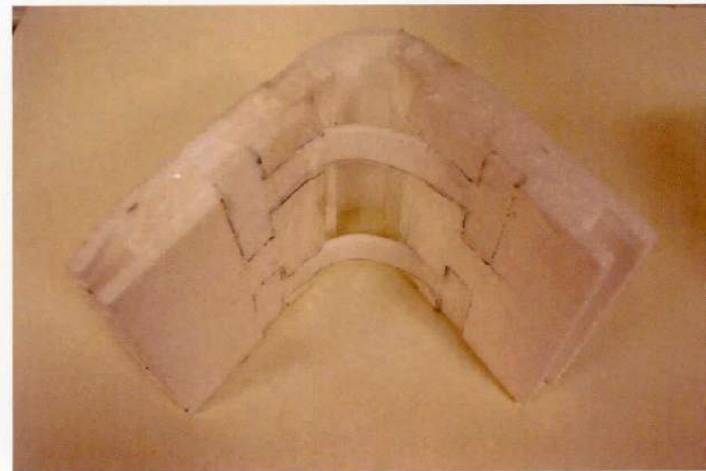
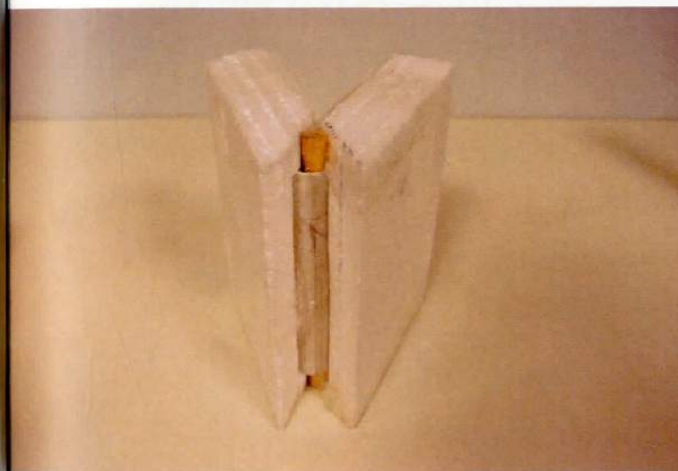
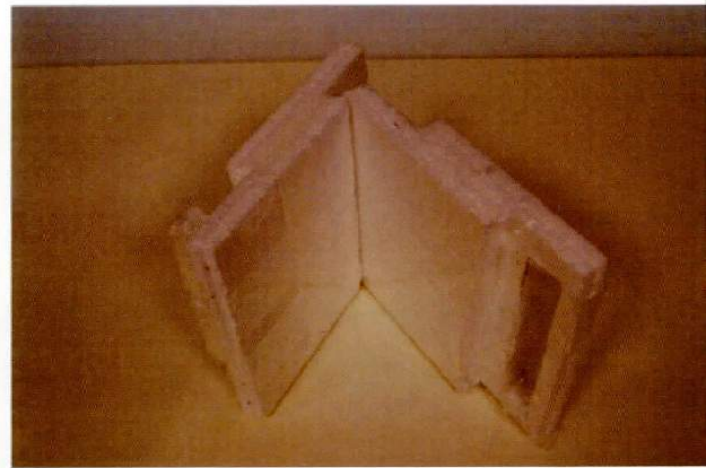
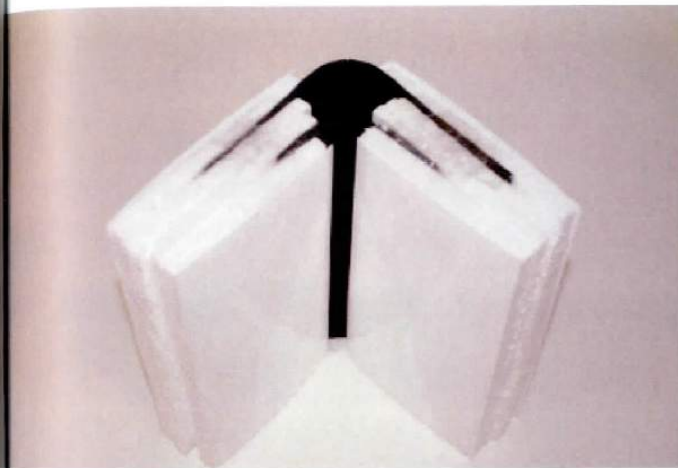
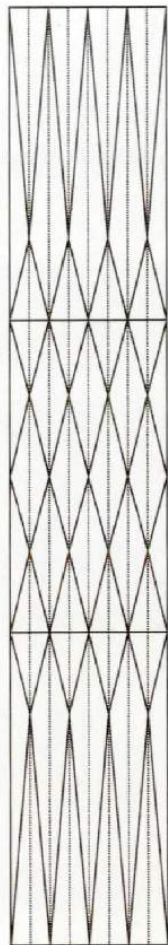
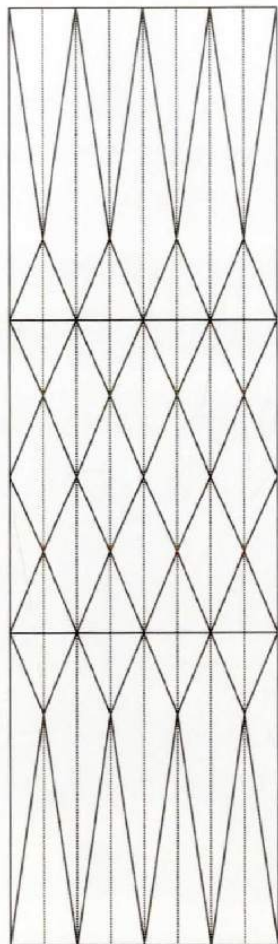
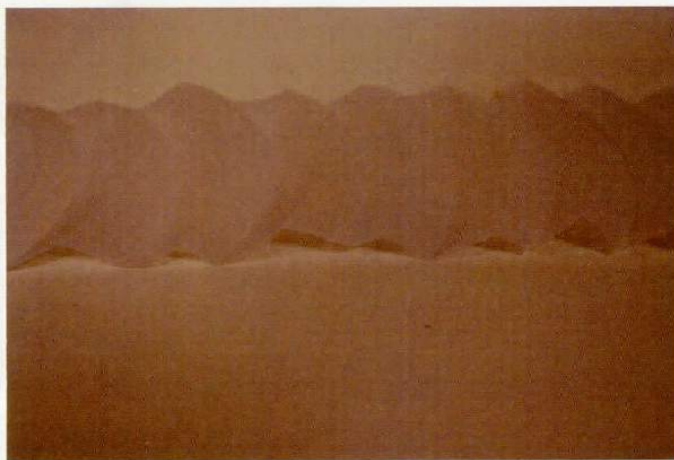
The city of London is known for its congested traffic conditions. One of the city's future plans is to expand London's public transport to river transport services. This potentially creates a dynamic relationship between users from the road level to the users on the river. With London's densely packed center as a point to relieve such congested pressure, how could we efficiently create pedestrian linkage between the road level to the river level?

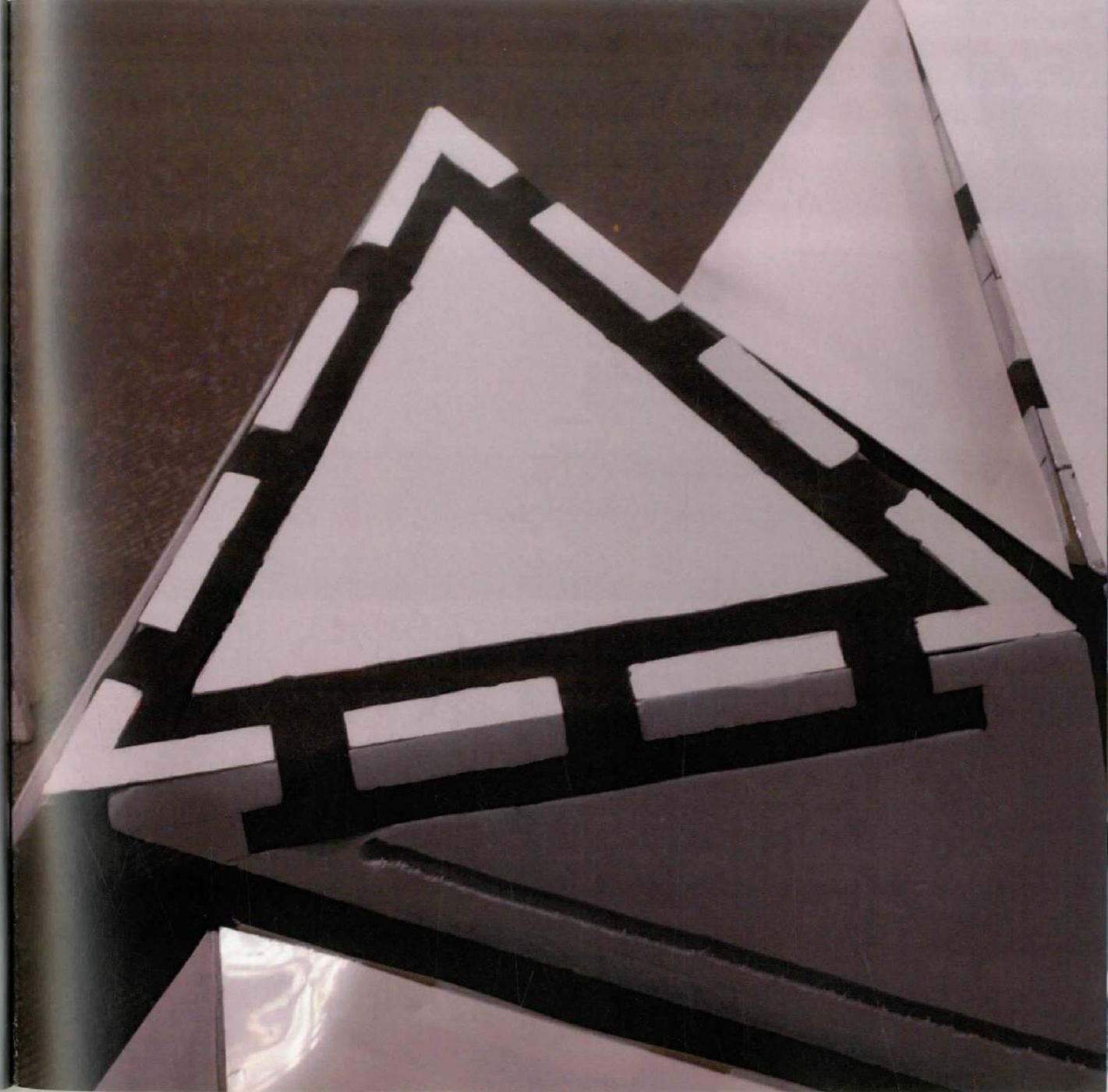
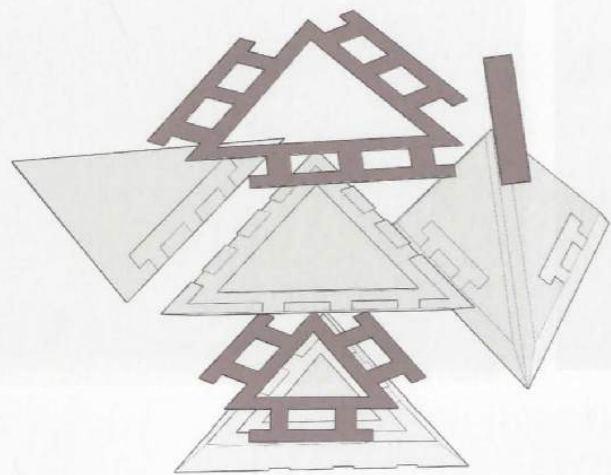
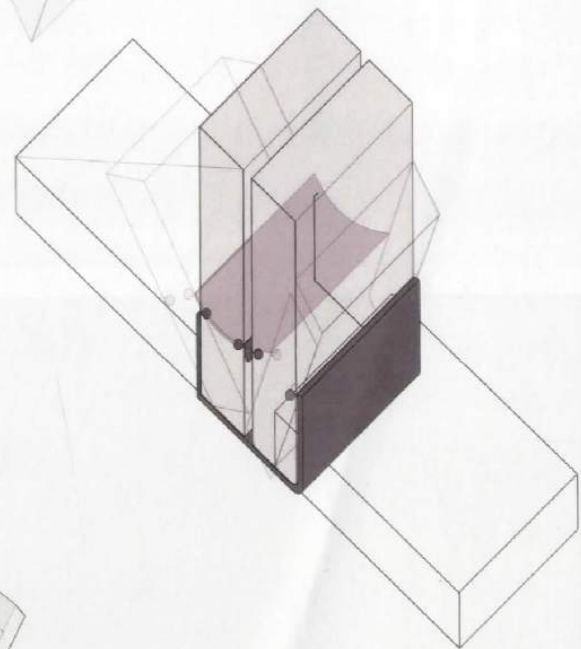
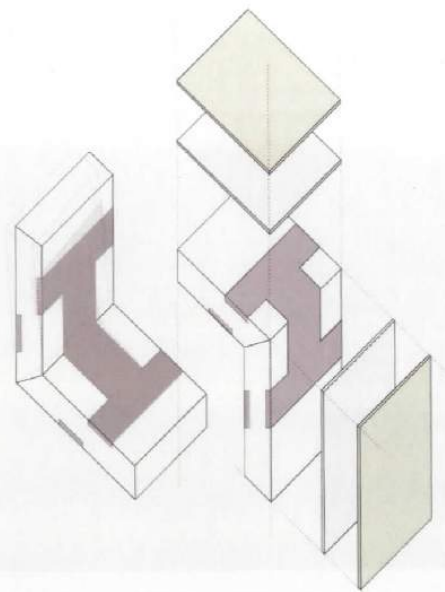
We took Rigid Origami as a departure point in our approach in creating pontoons which is space saving and efficient in construction and assembly from flat packed materials.

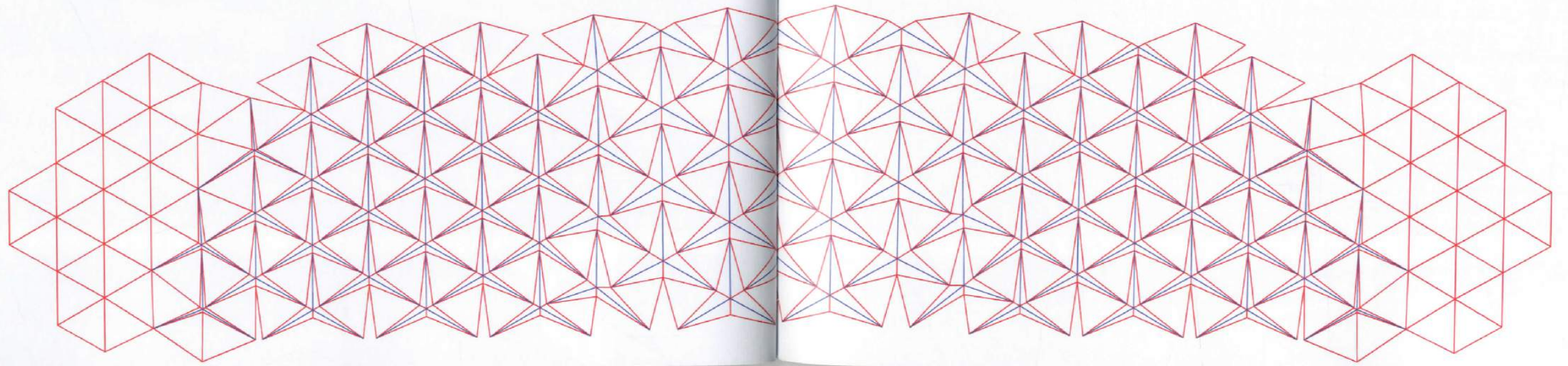
Construction Materials:

Foam
Epoxy Resin
Fiber Glass Fabric
Styrofoam
Fiberglass
Neoprene









Contouring London

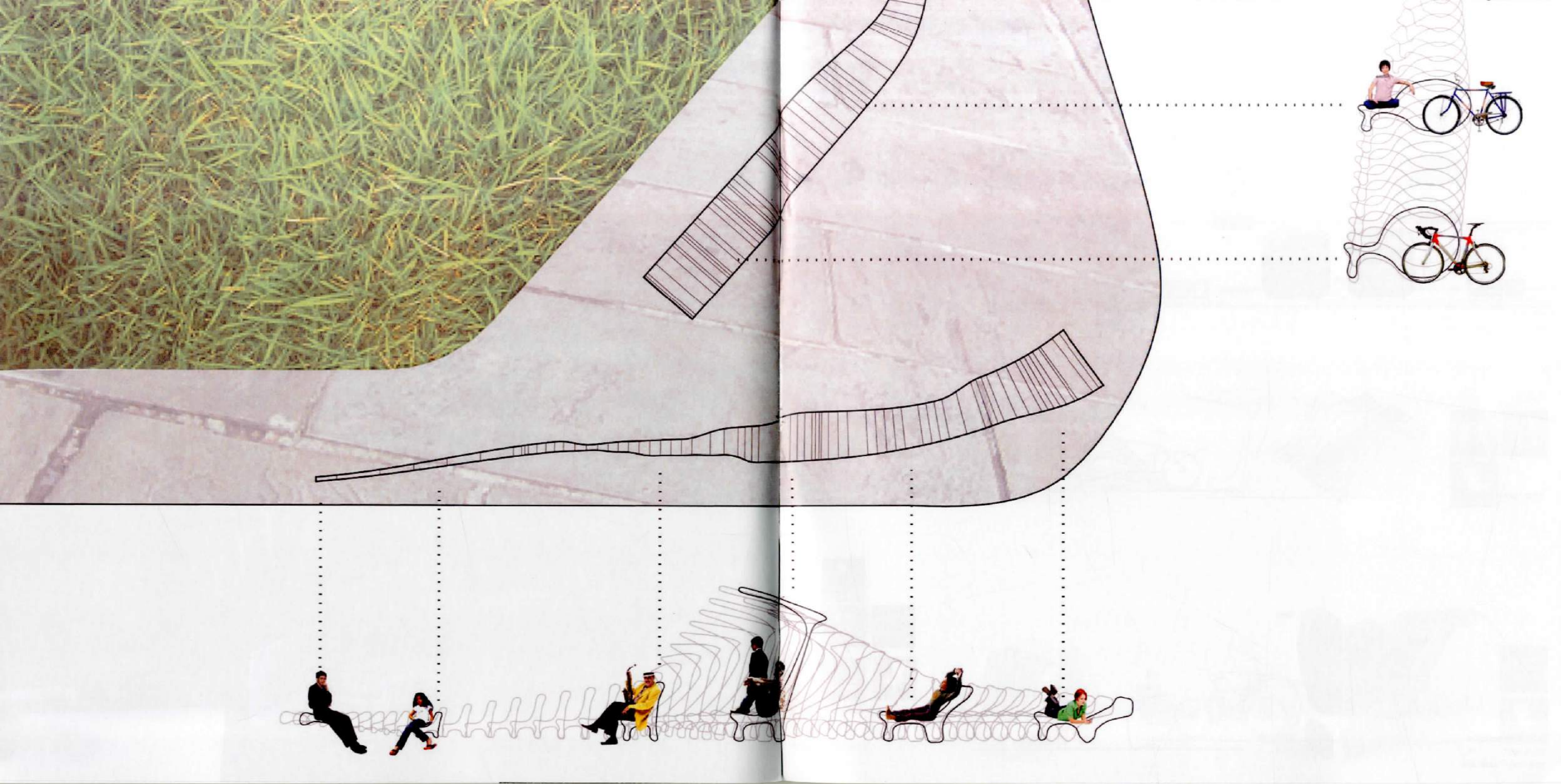
Chetan Gowder Basavaraj
Neysha Mejia
Marcos Maldonal Rigau

London is a highly dynamic place where a variety of unorganized activities take place. It is a city where users gather haphazardly, where signages dominate clarity, and where street vendors dominate streetscapes.

Our group is very much interested in developing an approach which could bring structure to the streetscape, and bring unorganized activities together to create interactions, and allow for hybrid spaces and activities to take place. Parkour/freerunning can be an example of how urban environments act as a platform for unpredictable and yet specific activities.

By analysing a segment of London streets, a number of activities were conglomerated by hybrid street furniture which provides the framework for linking multiple activities. At each section along the furniture lays an interpolated profile which describes neighboring activities. Through the use of Computer Numerically Controlled machines, flat panels are given shape to each of the sections with identifiers engraved for use during assembly. By assembly the sections sequential to the activities to be blended, a breeding of functions from bike storage to seating, to bus stops to canopy is streamlined as a continuous functional strip.





early morning station



service hub



park n seat



smoking corner



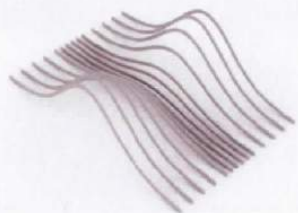
park n ride



rack n home



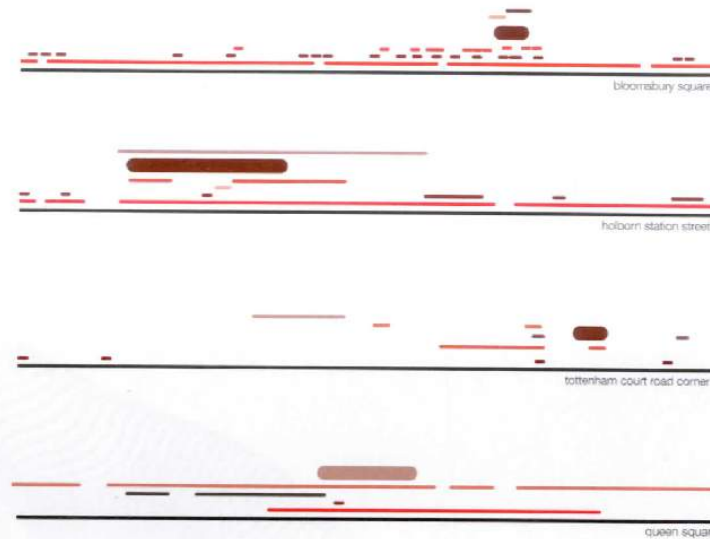
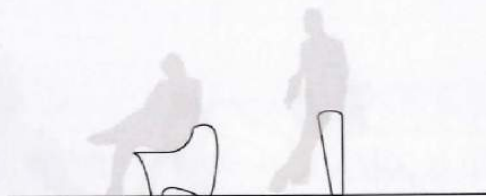
tourist trap



bike rack + shelter



bus stop bench +
park seat
+
ash tray / trash can



bloomsbury square

holborn station street

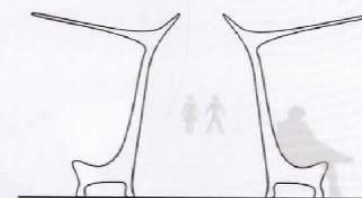
tottenham court road corner

queen square

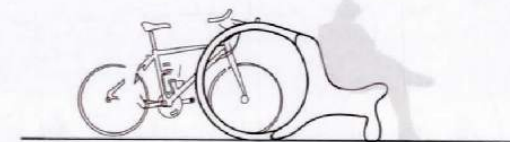
— sitting
— porch
— sign
— station
— bench
— telephone booth
— trash can
— vegetation
— railing

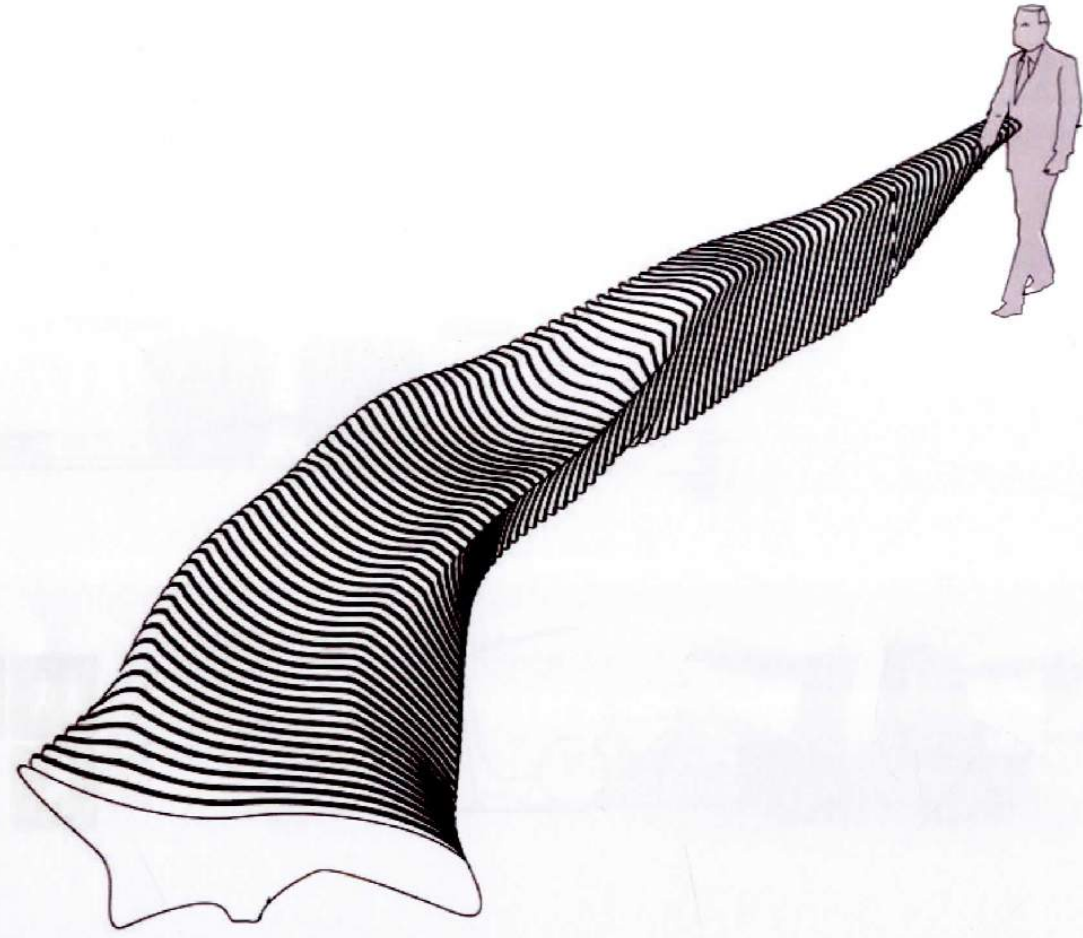


Bus stop + w . c .



seat + bike rack





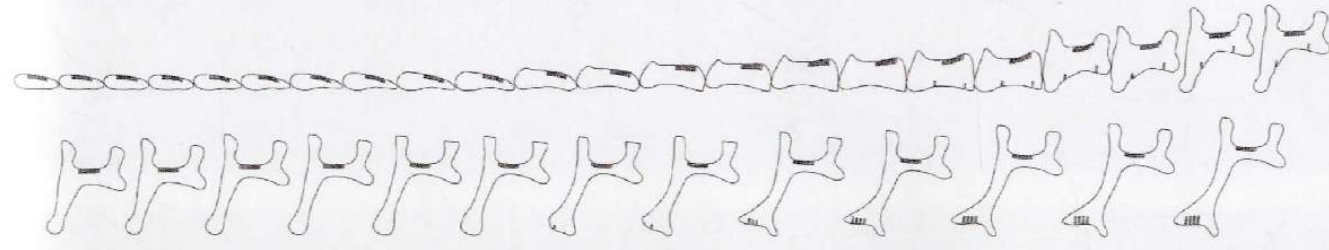
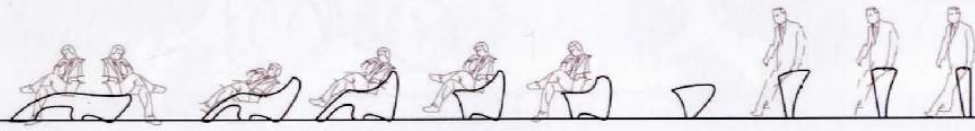
PUBLIC SPACE

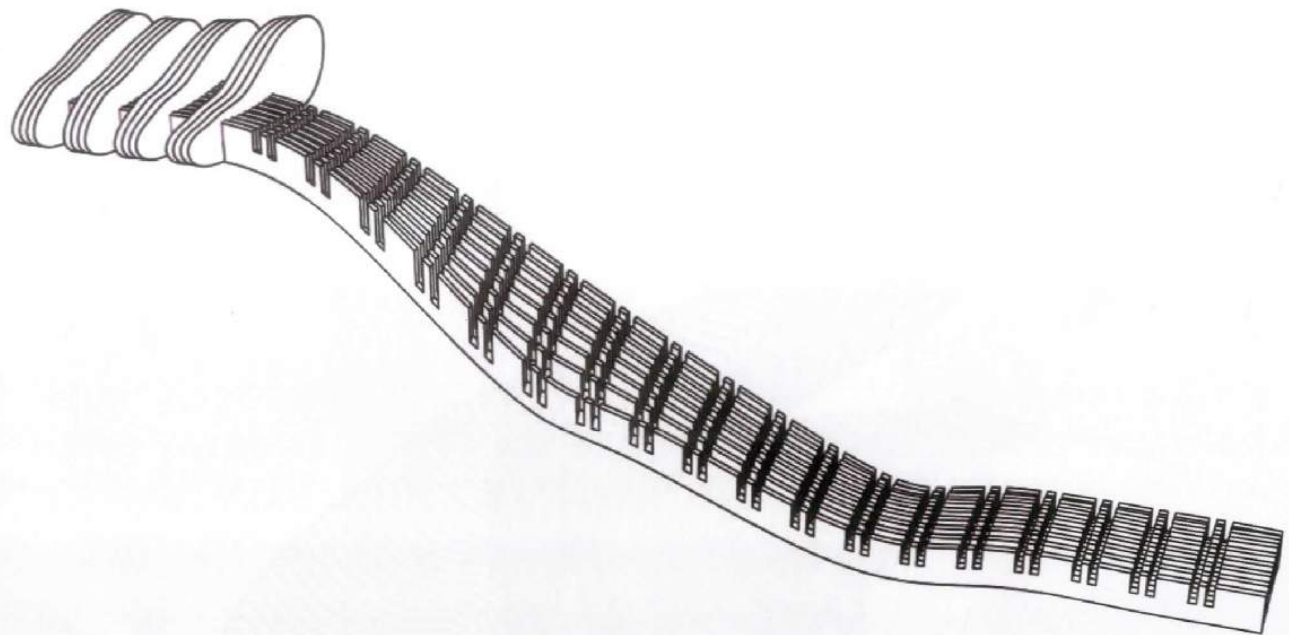
Long Wait



Quick Seat

BUS STOP





An Architectural Flash Mob

Jay Campbell
Ed Dudley

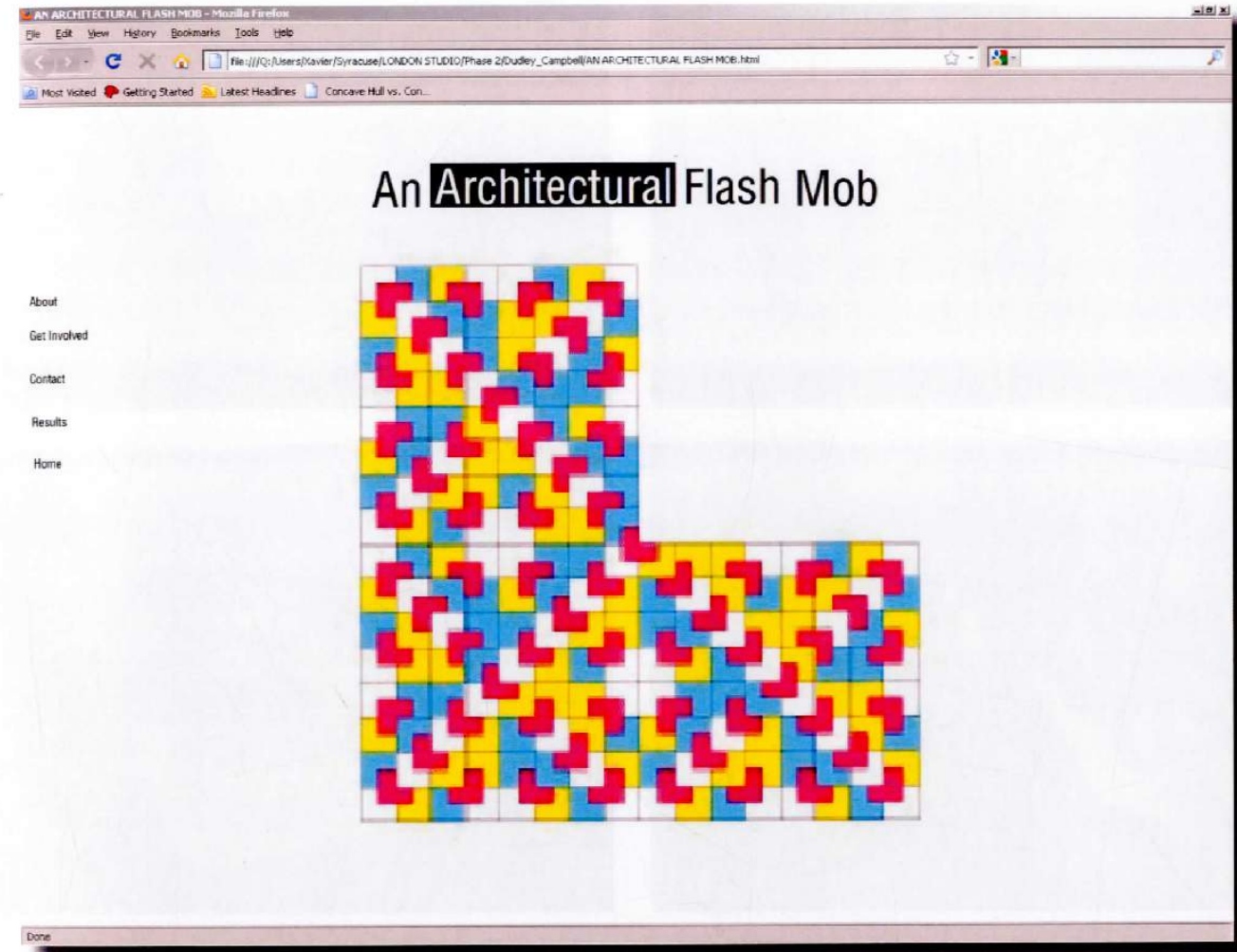
This introductory flash mob will need the help of 140 people to achieve a collective piece that will be transforming a site within Piccadilly Circus. The goal of this design is to promote the activity that is already present within the site. The act of friends and couples posing for photos, the sight of Busker's entertaining crowds, and the ability to offer a place of rest and to take in the sights of the neon lights and hustle and bustle that surrounds you. Our aim is to make people slow down and enjoy the little niches of London, to help them realize what makes this city so vibrant, yet personal.

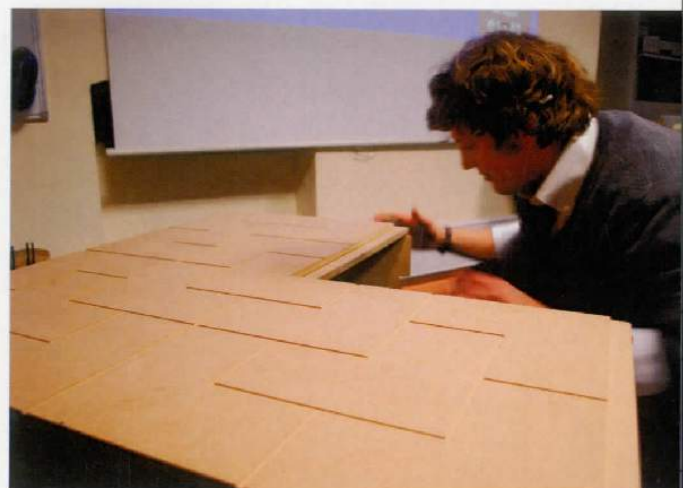
The idea is to use a standardized component that is available in three different sizes which sit at different elevations in order to allow a multitude of group sizes to become involved. Whether you are all by yourself or have a group of 15, or a man, woman or child, you can be involved with the assembly process.

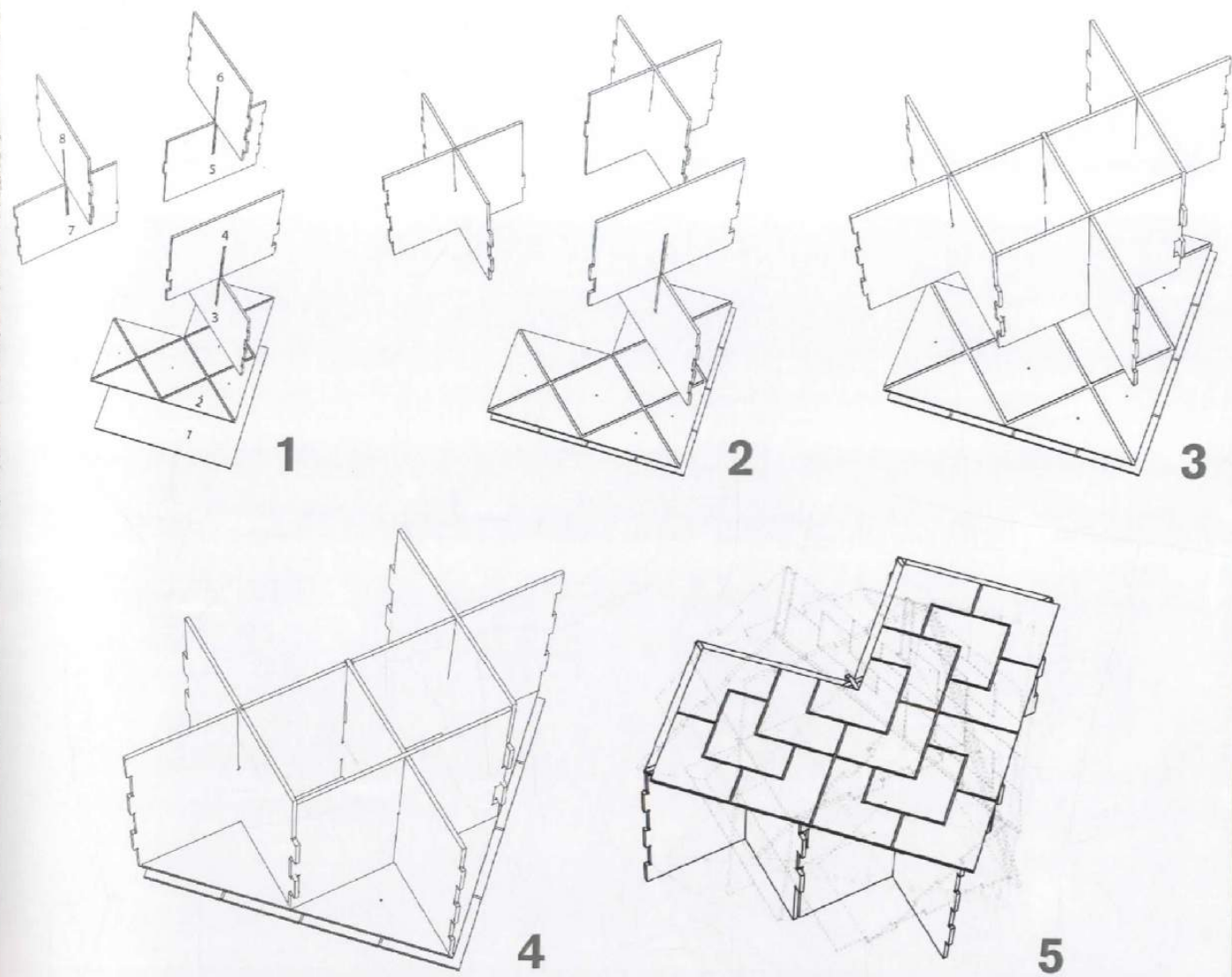
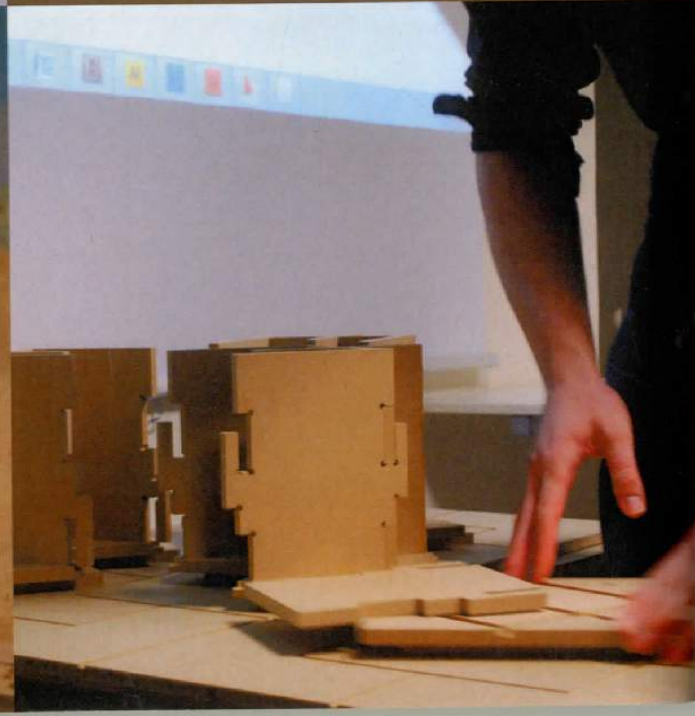
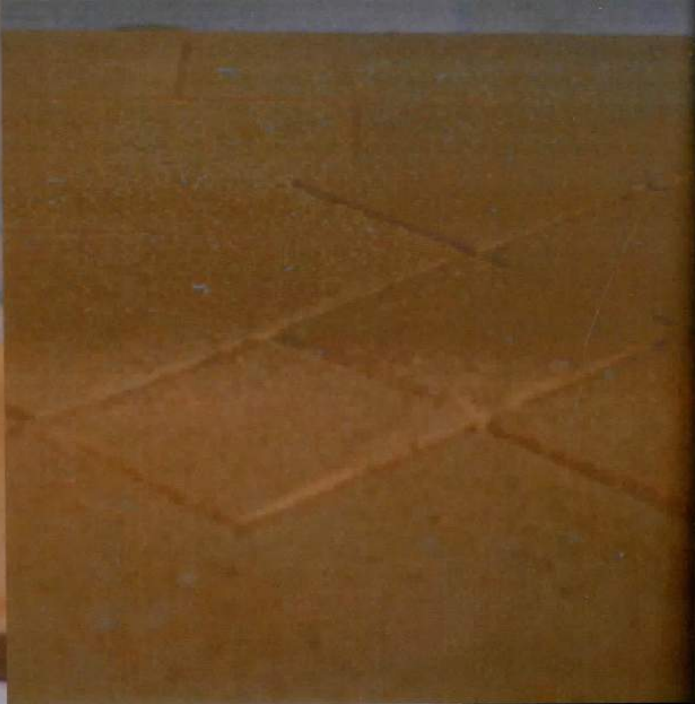
Our design is based on the use of aperiodic tiling which allows a form to grow in a matter that is determined by the limitations of the site. We have employed the use of a substitution tiling pattern known as the Chair tiling pattern. The basis of this is that substitution relies on the property of some sets of tiles to build bigger copies of them after arranging them in the

correct way, thus allowing the covered surface to grow as much as it is needed.

If you are interested in becoming involved please continue to the main page where you will be able to select a component that you will undertake in constructing, and bringing at a desired time to the site. The necessity of access to either a laser cutter or CNC machine is imperative and also widely available through the facilities of Metropolitan Works in Central London.



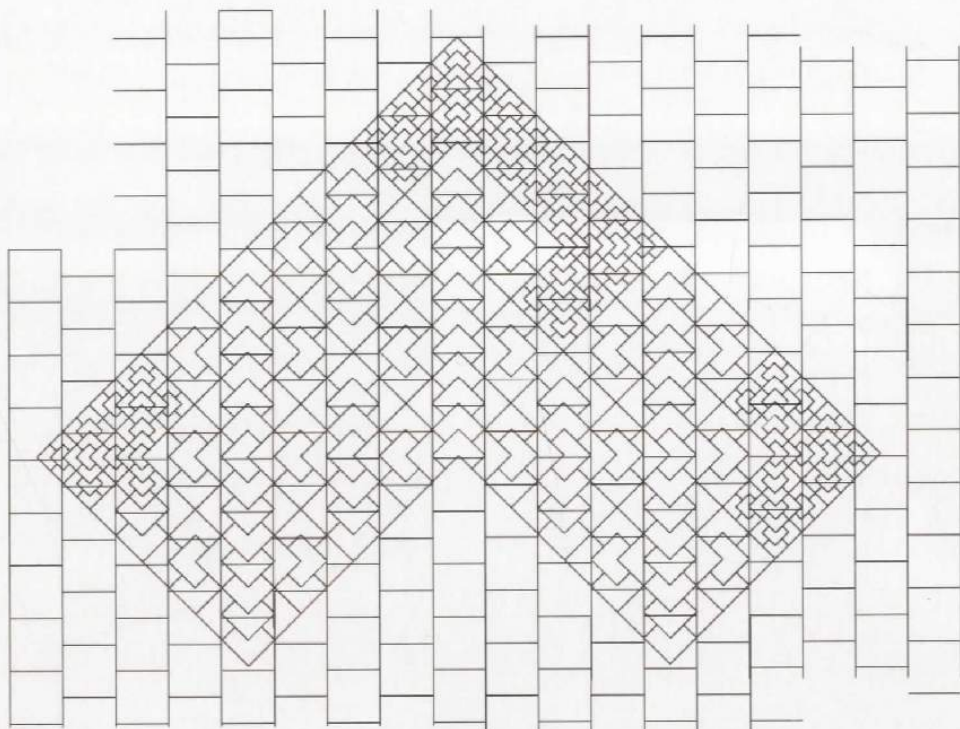






An Architectural Flash Mob

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Done

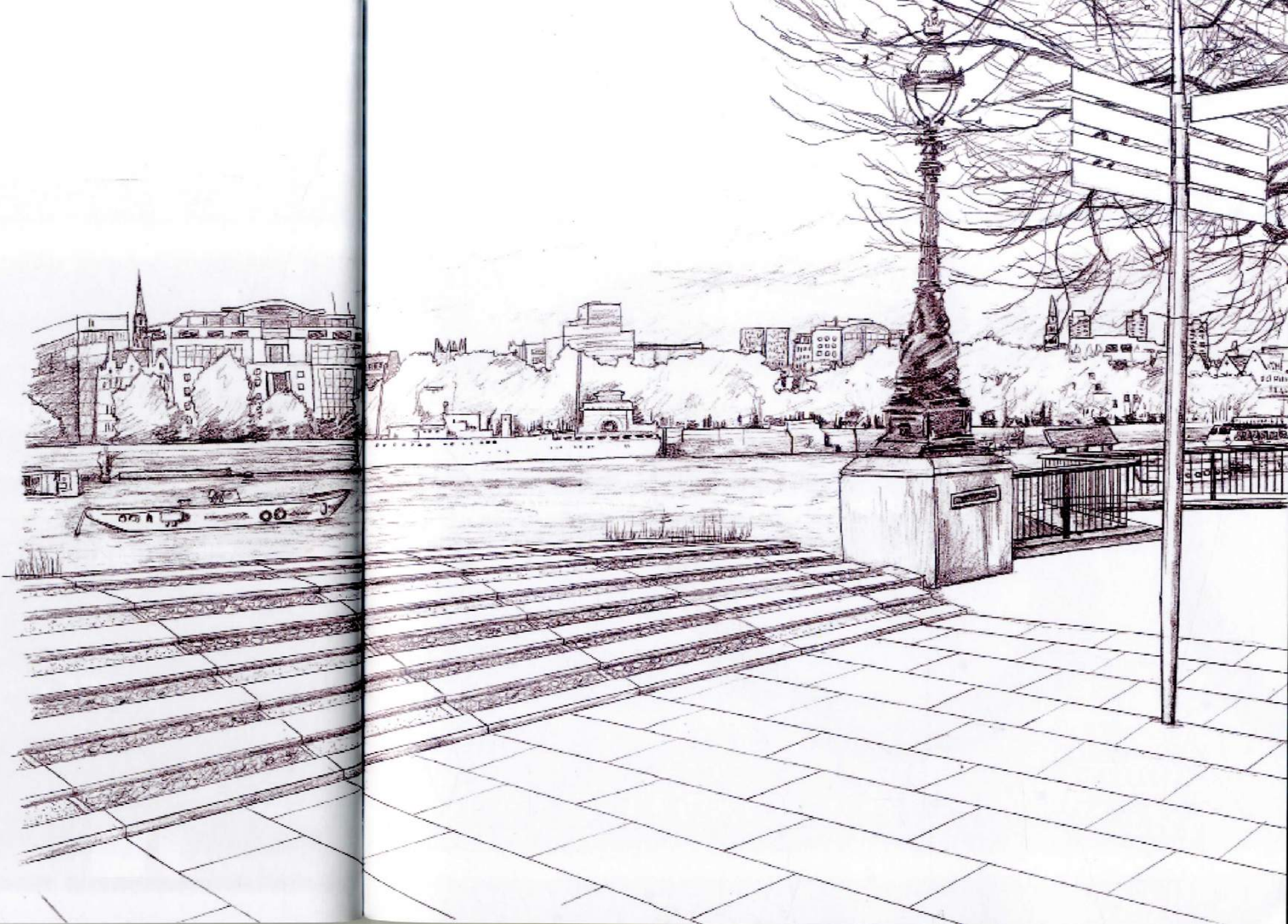


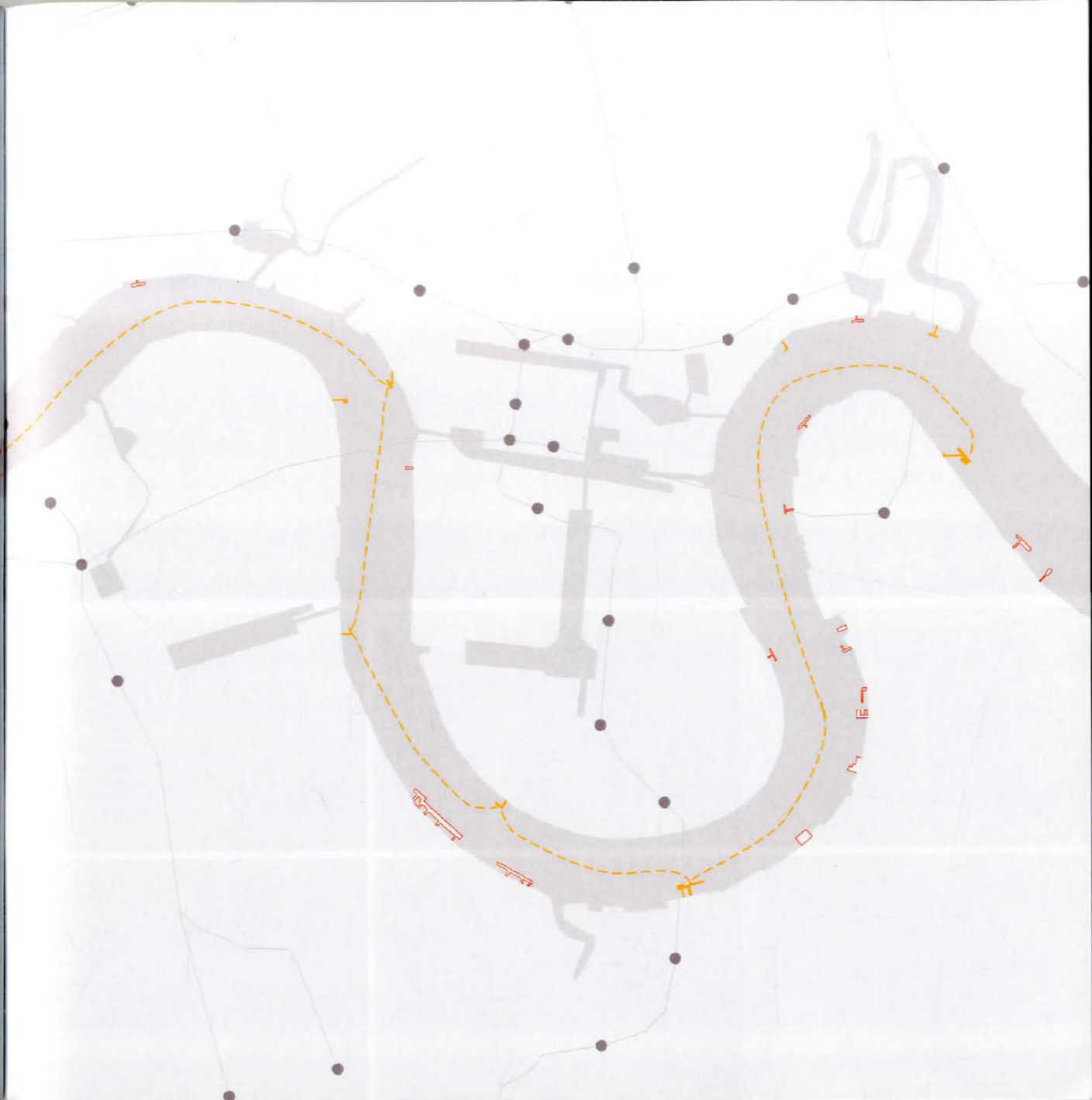
River-Tiling

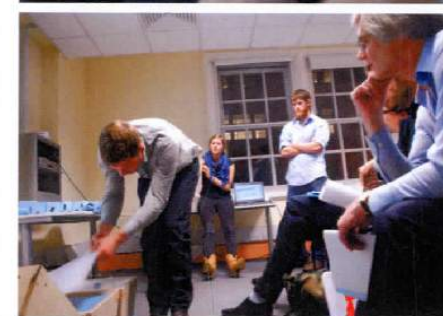
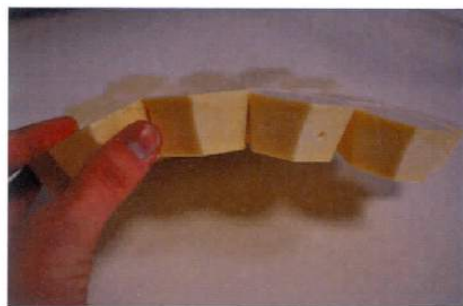
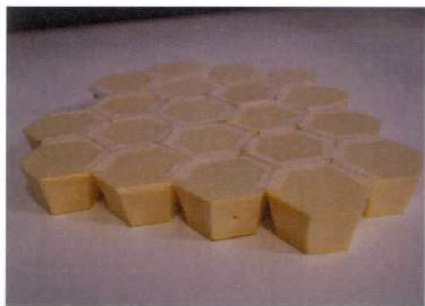
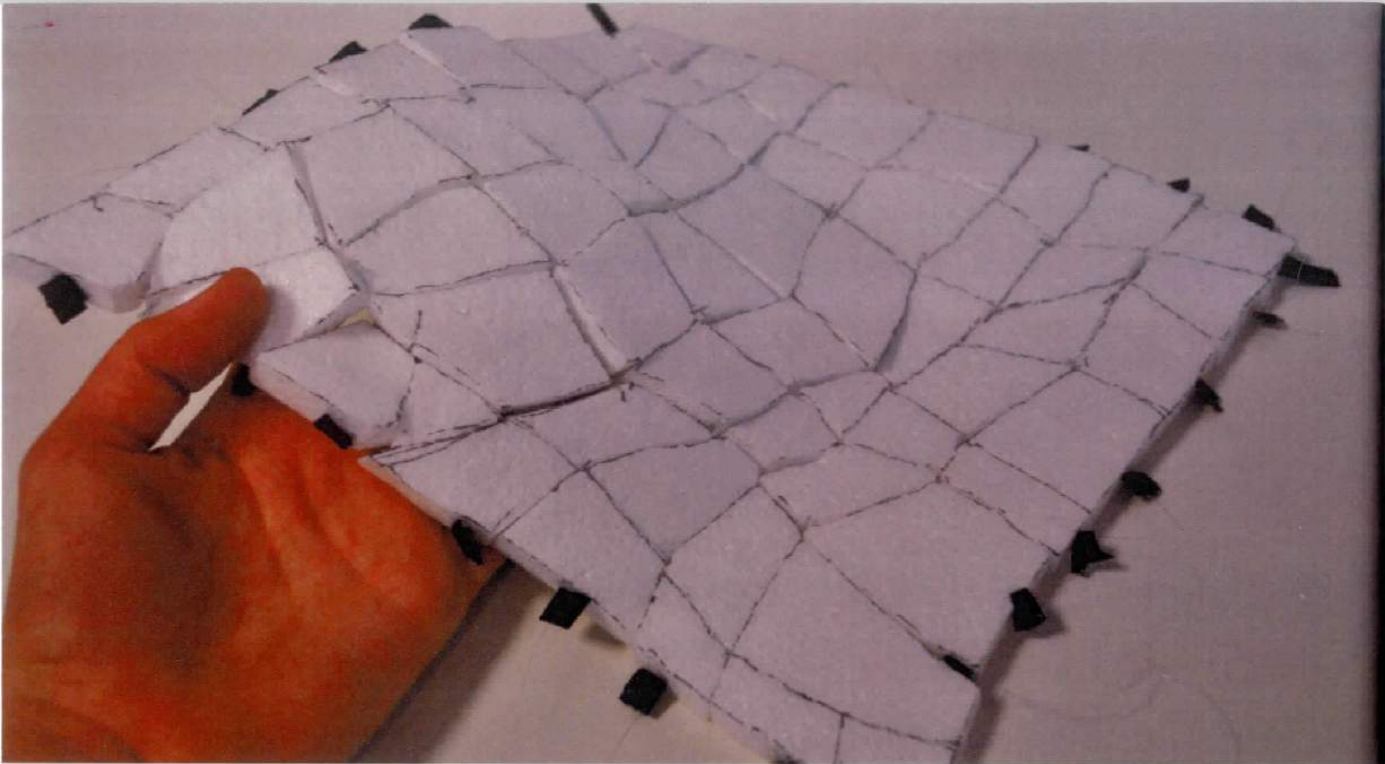
John Albert Denapoli
Kristen Melton
Nate Wooten

Thames River provides a great venue for the city of London. But access to the Thames is often proven difficult. Currently, the river mainly functions as heavy goods transport or the infrequent river boat for the casual tourists. We would like to reconsider the River Thames as a place which Londoners could engage with, and soften the boundaries between embankment and the river edge.

By a system of interconnected set of bouyant tiles, which creates a combination of steps, platforms and furnitures are subsequently created for users to improvise upon. Constrained in specific axis of movements, each tile negotiates with the fluctuating water levels and produces a landscape which conforms to the multiple tide shifts which occurs on the river. This provided us an opportunity to allow for a naturally configured venue to take place.














A man with dark curly hair, wearing a dark sweater over a light blue shirt and dark trousers, stands on a wooden structure made of stacked blocks. He is gesturing with his right hand towards a large projection screen behind him. The screen displays a presentation slide with a blue background and white text. The text includes "drill 12mm" next to a white circle icon and "cut" next to a red square icon. The room has a tiled ceiling with square ventilation grilles.

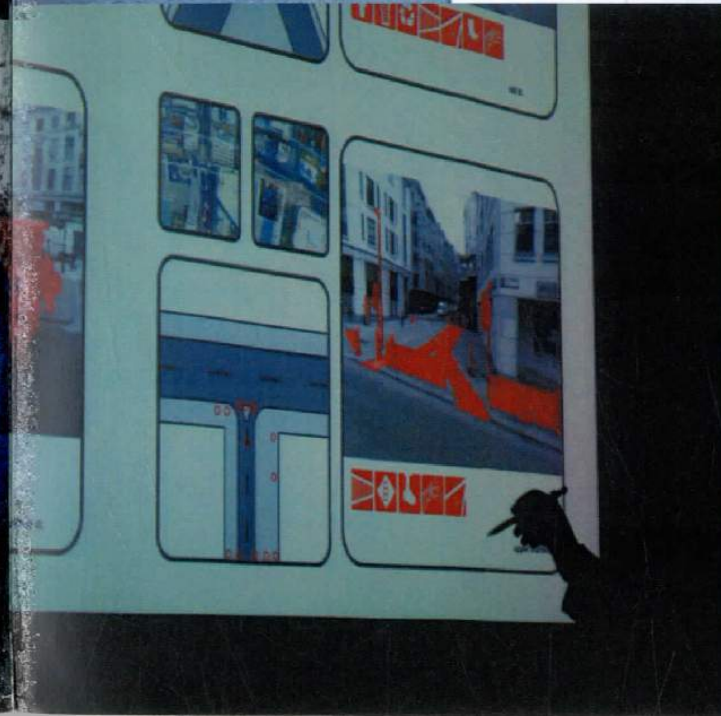
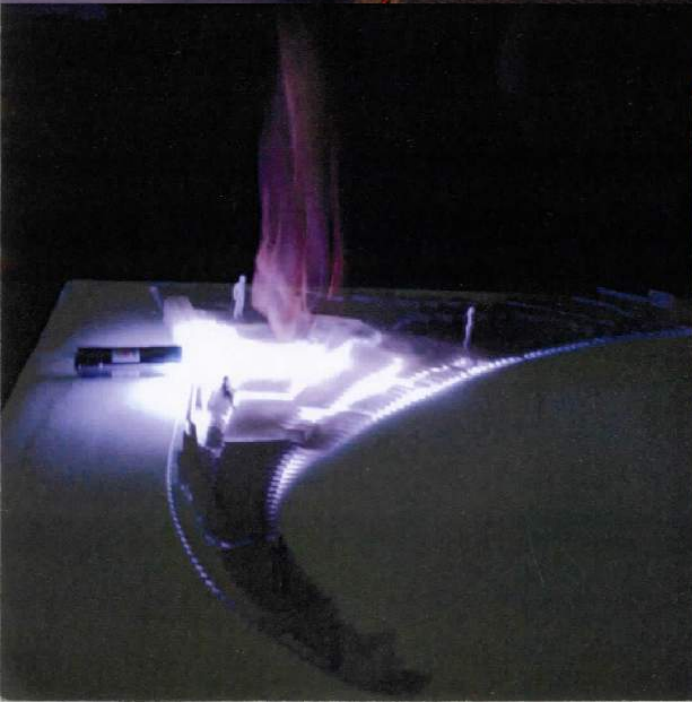
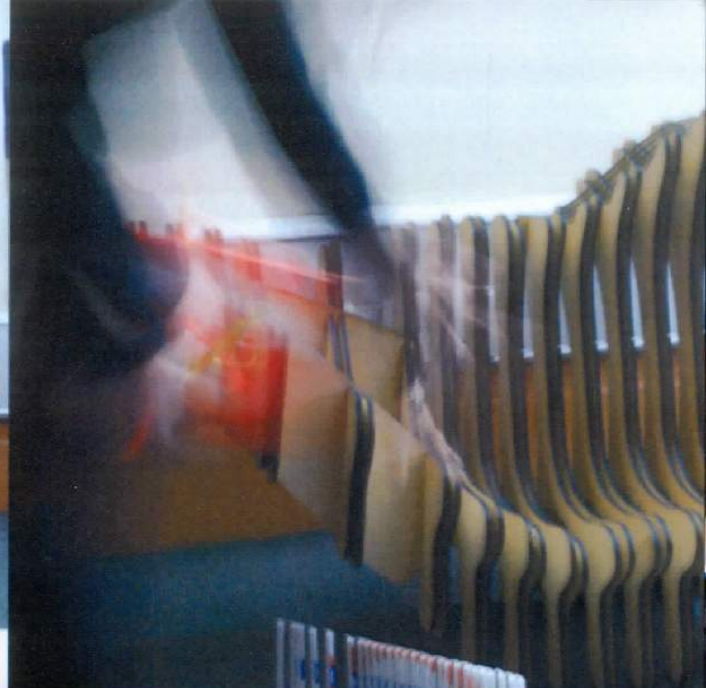
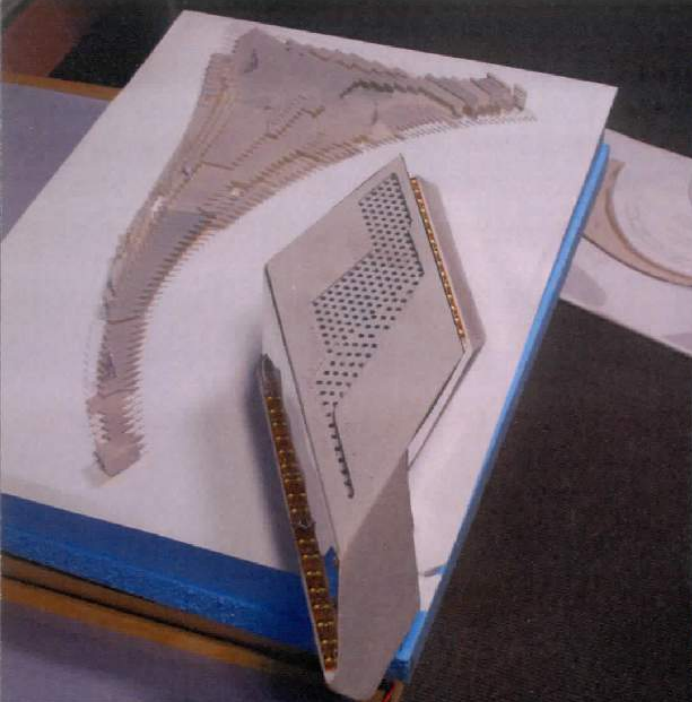
PHASE II

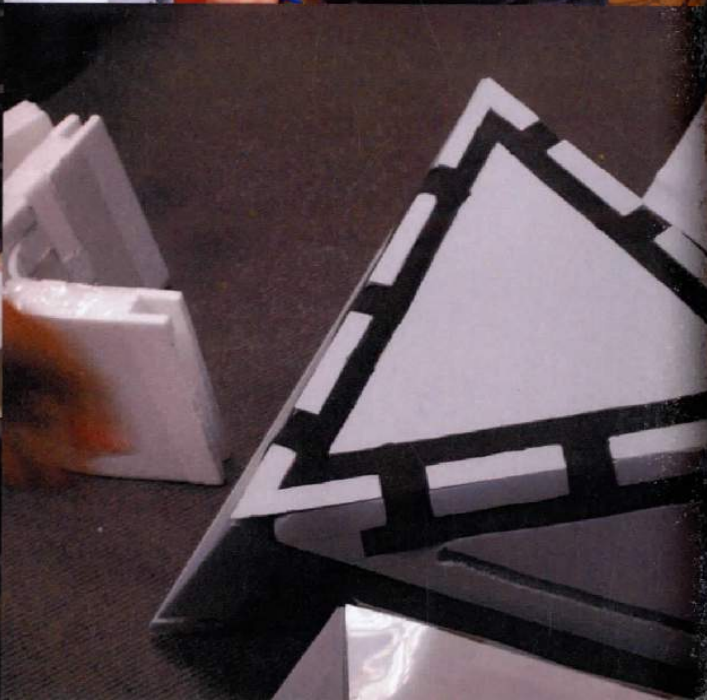


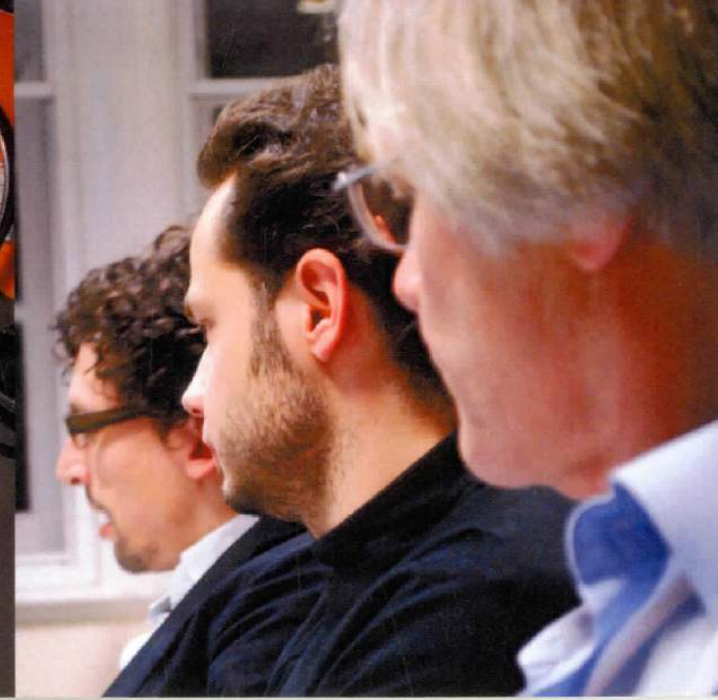
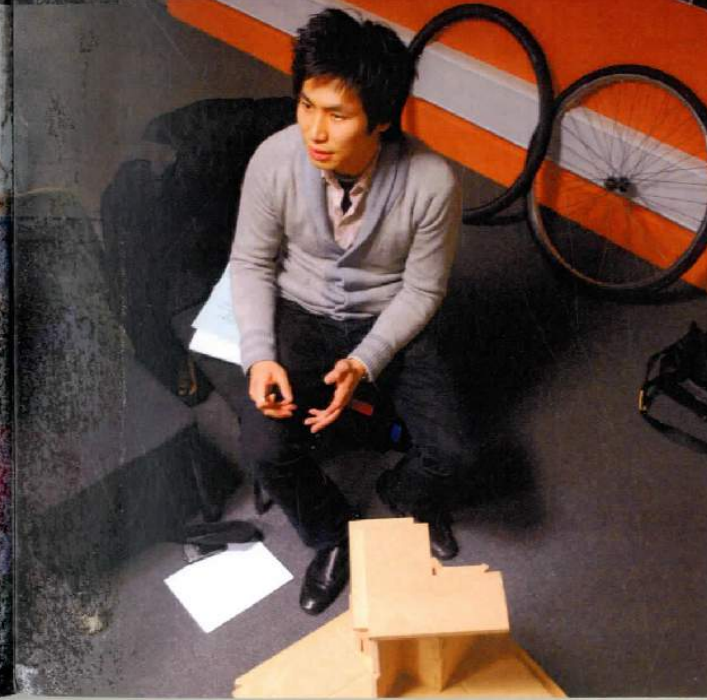
A man with dark curly hair, wearing a dark sweater over a light blue shirt and dark trousers, stands on a wooden structure made of stacked blocks. He is gesturing with his right hand towards a large projection screen behind him. The screen displays a presentation slide with a blue background and white text. The text includes "drill 12mm" next to a white circle icon and "cut" next to a red square icon. The room has a tiled ceiling with square ventilation grilles.

REVIEWS









Reading List

Performative Architecture, Beyond Instrumentality
Architecture in the Digital Age, Design and Manufacturing
Refabricating Architecture
An Evolutionary Architecture
Pamphlet Architecture 27: Tooling
Computer-aided Manufacture in Architecture - The Pursuit of Novelty
Workflow: Architecture -- Engineering
The Possibility of (an) Architecture: Collected Essays by Mark Goulthorpe,
From Control to Design, Parametric / Algorithmic architecture
Fab: The Coming Revolution on Your Desktop Manufacturing Processes for Design Professionals
Democratizing Innovation
Shaping Things
Cradle to Cradle
Process: 50 Product Designs from Concept to Manufacture
Everyday Engineering
IDEO Eyes Open: London: A Field Guide for the Curious (Eyes Open)
Digital Design and Manufacturing: CAD/CAM Applications in Architecture and Design
Architecture, Technology and Process
Architectural Design, Techniques and Technologies in Morphogenetic Design
Emergence: Morphogenetic Design Strategies
Blobmeister, First Built Projects
The Projective Cast
NOX : Machining Architecture
Blurring the Lines-Computer Aided Design and Manufacturing in Contemporary Architecture
Design Through Making
Contemporary Architecture and the Digital Design Process
Praxis: Journal of Writing and Building, Issue 6: New Technologies
Programming Cultures: Architecture, Art and Science in the Age of Software Development
Manufacturing Material Effects: Rethinking Design and Making in Architecture
Dynamic Digital Representations in Architecture: Visions in Motion
Abstract Space: Beneath the Media Surface
Digitalia: Architecture and the Digital, the Environmental and the Avant-Garde
From Models to Drawings: Imagination and Representation in Architecture
Softspace: From a Representation of Form to a Simulation of Space
Artificial Intelligence Applications in Manufacturing
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Proto Architecture: Analogue and Digital Hybrids
Digital Tectonics
Architecture and Computers
e-Topia
City of Bits
The Logic of Architecture, Design Computations and Cognition
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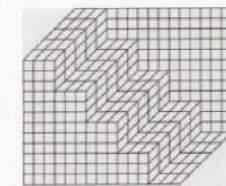


Materialise 



Foster + Partners

Freeform



Buro Happold



Zaha Hadid Architects

